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ABSTRACT

In August, 1971, The National Home Library Foundation of Washington, D.C., awarded to The George Washington University a grant to install a set of the ultra-microfiche "Library of American Civilization" (produced by Encyclopaedia Britannica's subsidiary, Library Resources, Inc.), together with all available associated equipment and bibliographic support. The GW Library was to make the resource known to a wide local audience, and to permit its use both on- and off-site during the calendar year beginning January 1, 1972. From its evaluation of the demonstration the Library hoped to develop information of help to other libraries in gaining maximum utilization of book resources in ultra-microfiche (i.e., highly reduced) form. This final report of the project describes the "Library of American Civilization" package; and, discusses its installation and operation, the reading equipment, collection usage and evaluation at the George Washington University Library. (Author/SJ)

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THE LIBRARY RESOURCES, INC.

LIBRARY OF AMERICAN CIVILIZATION DEMONSTRATION

The George Washington University Library

FINAL REPORT

to the

NATIONAL HOME LIBRARY FOUNDATION

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September, 1973

LI 004 473

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SUMMARY

In August, 1971, the National Home Library Foundation of Washington, D. C., awarded $40,000 to the George Washington University Library to install the ultra-microfiche Library of American Civilization (published by Encyclopaedia Britannica subsidiary, Library Resources, Inc.) along with its reading equipment and bibliographic support. GWU was to make this resource available to a wide local audience for use both on- and off-site during calendar year 1972, and to develop information to help other libraries make more effective use of book resources in highly reduced film format. Good potential for use of the LAC collection existed at George Washington because of its strong American Studies Program.

To make the availability of the collection known, it was given wide publicity. This included orientation sessions with potential users, distribution of book catalogs, printed announcements, wall posters, self-standing placards, preparation of an exhibit on the history of microfilm, filing in the library's catalog of the catalog cards purchased with the collection, and announcements in local and national publications.

A detailed examination from the library use standpoint was made of the individual components of the LAC package, consisting of the ultrafiches, the author, title and subject book catalogs, the Biblioguide Index, the shelf list booklet, a set of the optional catalog cards, twelve optional portable and two table readers. Preliminary to this examination, actual counts were made of the total number of fiches in the collection, as well as the number of titles and volumes purportedly reproduced on them. The fiches totaled 12,474, a figure that agrees with that of LRI. However, the title count - 9,620 - contrasts with LRI's figure of "over 12,000 titles.". The volume count - 15,347 (or 13,895 using a variant method of counting the pamphlets) - likewise contrasts with LRI's figures of "approximately 20,000 volumes" and "19,000 bibliographic volumes."

Some of the discrepancies between the GWU and the LRI figures may be due in part to the fact that LRI was unable to locate all the titles selected; in other cases, for technical reasons some could not be photographed; and in still others, LRI could not secure permission from the copyright owners.

Examination disclosed that the ultrafiches are susceptible to abrasion and excessive heat, and these qualities led to some damage to the fiches when used in the two types of readers. In addition, the print on some fiches is too small to permit comfortable reading. The method of arranging the photographic images on the fiches is inefficient.

The Author, Subject, and Title Catalog, all in book form, were found to be generally useful. The Biblioguide Index volume, utilizing a complicated indexing scheme, was felt to be less so. Study of the Shelf List booklet revealed that distinctive LAC storage and retrieval serial numbers are not assigned to the fiches in a continuous sequence, thus preventing quick inventory. The catalog card set contains no cross-references, although there are approximately 495 in the Author Catalog. In addition, the serial numbers essential to retrieval are printed in the upper right-hand corner of the cards and the placement there instead of in the left-hand margin caused our students to overlook them. Relevant data are provided concerning the cost in terms of man-hours and materials required to file the estimated 42,350 cards in GWU's card catalog.

In the demonstration, perhaps the most significant problems that developed involved the portable and the table model readers, both of which came equipped with 3-pole power plugs. These problems, including the implications for off-site use of the 3-pole plugs on the portable (Portareader), are too numerous to summarize. In the case of the portables, the difficulties were felt to be sufficiently serious to return the readers as unsatisfactory for use in the library situation. The terms of the manufacturer's warranty on this reader are felt to afford inadequate protection to the purchaser, and it is suggested that LRI offer its own written guarantee of satisfaction. (LRI made prompt refund to GWU, however, when the readers were returned.) The most serious shortcoming of the table reader, that of scratching the fiche during the loading and unloading operation, was taken care of locally at moderate cost, and other problems were deemed tolerable but not desirable. The reader-printer announced never materialized.

Use of the LAC was very good, but it obviously could have been better had it not been necessary to return the portable readers. User reaction was generally enthusiastic, with only one voice in twenty-four expressing complete disappointment with the Microbook ultra-microfiche approach to research problems.

No attempt was made to evaluate the LAC collection, but efforts were made to develop information useful for that purpose, including a comparison of the number and dates of imprint of titles in the LAC with those in the standard annotated bibliography covering the same field, A Guide to the Study of the United States of America: Representative Books Reflecting the Development of American Life and Thought. From this it became clear that LAC contains mostly older materials, while the Guide, published in 1960, lists more recent works. Another effort concerned the number and identity of incomplete sets of multi-volume titles in the LAC, and still another the extent of use of reprints - 1% - in the photographing operations. And finally it is suggested that perhaps the best approach for libraries seeking to determine the potential usefulness of the LAC collection would be to examine closely the contents of the Author Catalog where all the requisite bibliographic data for making such an assessment will be found.

BACKGROUND AND PURPOSE OF STUDY

In August, 1971, The National Home Library Foundation of Washington, D. C., awarded to The George Washington University a grant of $40,000 to install a set of the ultra-microfiche Library of American Civilization (produced by Encyclopaedia Britannica's subsidiary, Library Resources, Inc.), together with all available associated equipment and bibliographic support. The GW Library was to make the resource known to a wide local audience, and to permit its use both on- and off-site during the calendar year beginning January 1, 1972. From its evaluation of the demonstration the Library hoped to develop information of help to other libraries in gaining maximum utilization of book resources in ultra-microfiche (i.e., highly reduced)form. At the end of the one-year demonstration George Washington University was to take title to all materials and equipment used in the demonstration.

The Library of American Civilization (LAC) is the first of a number of series planned in the ultra-microfiche format by Library Resources, Inc., (LRI). According to the pre-publication brochure, The Microbook Library Series, and information supplied at the time, it consists of approximately 13,500 3" x 5" microfiche containing over 6,000,000 pages and about 20,000 volumes, covering all aspects of America's culture from the beginnings up to the outbreak of World War I. The installation at GW was to be accompanied both by printed (book) catalogs of the collection and by a regular set of catalog cards for each of the over 12,000 titles in the collection, as well as by table readers, a number of portable, take-home type readers, and a reader-printer for those users desiring paper copy.

It was believed that the acquisition of LAC by The George Washington University would be desirable because its American Studies Program is one which is receiving heavy emphasis both at the undergraduate and graduate levels. The program currently has about 130 students enrolled each semester in Introduction to American Civilization, about 45 students in the Proseminar in American Civilization, and about 60 graduate students in one or more American Studies readings courses and seminars -- totaling approximately 1,400 semester credit hours

per year. There are three full-time and two part-time faculty members. There is substantial on-going student and faculty research, with but limited library resources in book form in the GW Library, necessitating at present wide use of other library resources in the metropolitan area. Hence, the potential for use of a collection such as The Library of American Civilization existed. However, before that potential could be realized it would be necessary for the pertinent students, faculty and others to be made aware of the availability of the collection in the GW Library.

PUBLICITY

It was evident then at the outset that a multi-pronged publicity campaign would be required to acquaint all interested persons with the nature and existence of the LAC collection in The George Washington University Library. This took the following forms:

a) The holding of orientation conferences with LRI guest speakers for faculty, graduate students, library staff members, both from GW and from the other Washington Consortium libraries - American, Catholic, Georgetown, and Howard - and for interested librarians from nearby U.S. Government libraries, as well as for some non-librarians.

b) The subsequent scheduling of demonstrations/ orientation meetings of selected classes of students, along with their professors.

c) The furnishing to the department chairmen deemed to have the largest number of potential student users - American Studies, History and English (American Literature) - of complete sets of the various author, title and subject book catalogs, as well as the Biblioguide Index volume.

d) Distributing a specially printed flyer describing the collection and giving its location to 32 faculty members teaching in fields touched by the LAC with the request that it be placed on any bulletin boards within their control. (Attachment A)

e) Posting in appropriate places within the library copies of the flyer, as well as wall posters and self-standing placards furnished with the collection.

f) Displaying in museum cases in the room in which the collection was housed an exhibit depicting the history of microfilm with emphasis on the evolution of the high-reduction ultrafiche concept.

g) Filing the long-delayed catalog cards in the main public catalog, an action which was completed in early June, 1972, too late to be of use during the first semester of the demonstration year.

h) Publishing announcements in the D.C. Library Association organ, Intercom, and in other more widely distributed journals to effect maximum public exposure to the local and national library community. (Attachment B)

THE LAC PACKAGE

This consists of the following items, each of which will be discussed in detail subsequently: the ultrafiche collection, the author, title and subject book catalogs (5 copies of each), the Biblioguide Index (also in 5 copies) and two copies of a soft-cover booklet, the Shelf List. In addition, ten copies of the four hard bound volumes - author, subject, title and Biblioguide Index - were provided in the ultrafiche format. Included was one table reader, with additional ones available at $450.00 each. The total cost of the basic package was $19,500. Optional portable readers were available at $165.00 each. Optional also was the set of catalog cards, estimated by LRI to number 75,000, for $4,000.00 the set.

Because the figures supplied in the pre- and post-publication brochures regarding the number of fiches, and of titles, volumes and pages photographed for the collection exhibited some variation, it was decided to ascertain, when feasible, the actual count of each. The results follow:

a) Fiches count - 12,474.

This was determined by actually counting the fiches in the file. This figure agrees with the latest LRI count as given in the introduction to the Biblioguide Index volume, which was published in June, 1972.

b) Title count - 9,620.

This was obtained by counting all the titles, excluding alternative titles, that appear in the Title Catalog, as well as those new ones in the Addendum, which leaflet was published separately at a later date. The

pre-publication brochure, The Microbook Library Series, gives the figure as "over 12,000 titles." (Attachment C)

c) Volume count - 15,347.

This was derived from a count of the volumes as given in the Shelf List. When in a few instances the number of volumes in a multi-volume set was not given, the number shown in the Author Catalog was used. This total of 15,347 is broken down into 6,777 "single volume works," 5,192 "multi-volume works," 1,774 "periodicals" and 1,604 "pamphlets and short works." In addition, the 1,604 pamphlets and short works on 152 fiches, each of which contains reproductions of from 4 to 15 such items, were counted as individual volumes, although the fiches count - 152 - would seem to be more appropriately considered as "volumes." With the latter method of counting, the total volume count would therefore be reduced to 13,895.

The number of volumes given in the above-mentioned pre-publication brochure is "approximately 20,000 volumes," and in another post-publication leaflet entitled The Microbook Library of American Civilization it is shown as "19,000 bibliographic volumes." (Attachment D)

d) Page count.

For obvious reasons, no attempt was made to count the vast number of pages photographically reproduced on the fiches in the collection. This figure is estimated at 6,000,000 in the pre-publication brochure and at more than 6,700,000 in the later one cited immediately above.

The differences between the LRI figures and the actual counts made at the George Washington University may be accounted for, in part at least, by the following admission contained in the introduction to the Biblioguide Index:

> "Not all of the titles nominated by the Advisors and by the Final Board of Review could be found, despite the fact that one of the [photographing] sites was the Library of Congress; and some titles, though found, could not be filmed for technical reasons. In addition, permission to include in the Library certain copyrighted titles could not be obtained from the proprietors."

Nothing is said about the number of titles or volumes represented by these selected but unphotographed items, nor whether the search for them continues or has ceased.

1. The Ultrafiches.

So named because of the high reduction - 55X to 90X - employed to photographically reduce the pages of originals to economic dimensions, these 3" x 5" (7.2 x 12.3 cm.) film transparencies can accommodate as many as 1,000 page images each, arranged in 50 columns and 20 rows. As a consequence of this high reduction ratio, special reading equipment with suitable lenses to enlarge the page images to legible size is required. The images themselves are positive reproductions of the pages photocopied. The large capacity per fiche permits the desirable practice of reproducing only one title on each, except for the multi-volume works, the periodicals and the pamphlets included in the collection.

Each fiche has an eye-legible heading containing the main entry, the title and volume number, etc., as needed to identify the contents. In addition, in the upper right-hand corner is the distinctive LAC serial number assigned to each fiche for use in filing and retrieval. The fiche physically is composed of three layers of material, two outer Mylar plastic laminate sheets fused onto a sheet of cellulose acetate in the center to form a stiff card-like unit. Although quite tough in some ways, the Mylar covering sheets exhibited a high degree of susceptibility to image-disfiguring and image-obliterating scratches produced in normal use in the reading machines. They also have a low melting point, as was ascertained during the demonstration project when excessive heat was focused on them in the portable readers, causing the Mylar to blister or pucker and thereby to sustain permanent damage.

Some of the fiches contain images of texts which, when viewed on the screen of the table (912) reader, are just above the threshold of legibility and could hardly be read extensively without eye discomfort. On the portable (710) reader with its lower magnification - 75X - the level of legibility becomes unacceptable. Falling in

this category are 13 volumes of Niles' Weekly Register and 22 volumes of Niles' National Register that are reproduced on fiches LAC 31256-62 and 31263-31273 respectively. By way of contrast, the reproductions of these same volumes on roll microfilm as published by Xerox/University Microfilms in the American Periodical Series II are quite readable.

The photography of the fiches varies in quality, with uneven densities and occasional bits of dirt or dust blotting out a word or part of one here and there.

Each fiche comes in a filing envelope on the front of which is printed pertinent bibliographic data as found in the Author Catalog.

The method of arranging the photographic images of the pages on the fiche is rather inefficient when used with the two types of readers provided. After going through the first fifty pages from left to right, the user, instead of dropping to the page in the row immediately beneath, is required to "knurl-knob" his way back to the beginning of the next row and proceed again from left to right. Pursuing the analogy of the book for which the fiche is supposed to be a substitute, this is tantamount to going from the fiftieth page in a book to the hundredth and then backing up to the fifty-first before resuming reading. This backtracking puts an unnecessary burden on that part of the fiche transport mechanism in both readers which, already, because of its function - page changing - is subject to the most wear. In addition, it was determined experimentally that such reversal of direction required about 16 normal twists of the horizontal scan knob on the 912 table reader and about 35 such turns on the 710, consuming about 15 to 35 seconds each respectively. Therefore, not only is the student's thought interrupted when passing from the fiftieth to the fifty-first page by this procedure, but also he is lengthening his use of the machine.

These difficulties could have been avoided had the page images been placed on the fiche in the boustrophedon method; i.e., alternately in rows from left to right,

then right to left, and so on, so that the fifty-first page would be found immediately below the fiftieth, etc.

The present method of arranging the pages on the fiche, therefore, seems to be at odds with LRI's avowed intent, as stated on page 5 of its pre-publication brochure, The Microbook Library Series, "...to develop a technology that offers comfort, convenience, and ease of use for extended book reading on microforms."

Replacement fiches, at a cost of $2.50 each, plus handling costs, are available from stock at LRI in Chicago. Discounting on large orders is also available. Should items wanted be out of stock in Chicago, according to information furnished by LRI, it may take up to ninety days to have them supplied by the manufacturer, UMF, Inc., in Los Angeles.

2. The Author Catalog.

This consists of one, 998-page well-printed and well-bound volume, with entries printed two columns to the page and arranged in a manner similar to those in the National Union Catalog. Examination of this LAC catalog, which gives for each entry complete bibliographical data, including tracings, disclosed the following shortcomings:

a. Maiden names have been omitted from entries for married women.

b. Political jurisdictions have been omitted from some entries, as, for example, (state) was omitted from the main entries on p. 643 (LAC 16227 and 14941) which read: New York. Chamber of Commerce of the State of New York. In another case (p. 605) the "see reference" reading "Metropolitan Museum of Art..." should read "Metropolitan Museum of Art, New York..."

c. Also noted was incorrect punctuation in the main entries which affects filing, as "Massachusetts, Constitutional Convention, 1853" (p. 591) which should

read: "Massachusetts. Constitutional Convention. 1853." On page 391 the see reference "H.H." should read "H., H."

d. Some errors in spelling names were also noted, as "Madison, Dolly..." (p. 573) which should read "Madison, Dolley;" and "Brandeis, Louis Demblitz" (Addendum, p. 1a) which should read "Dembitz."

3. The Subject Catalog.

This volume of 854 pages with two columns per page contains in alphabetical arrangement by Library of Congress (LC) subject headings, entries for all titles in the collection. The entries are shortened so that they extend only through the imprint line and each contains the identifying LAC filing control number. In some cases, as with the LC practice, some titles will be entered under more than one subject as appropriate. The authority for the subject headings and cross references is Subject Headings Used in the Dictionary Catalogs of the Library of Congress (7th ed.).

4. The Title Catalog.

This volume, well-printed and well-bound as are the other two in the set of three, contains 480 pages of titles and alternative titles, arranged two columns to the page. As with the subject catalog, entries are abbreviated to extend only through the imprint line. The main entry is printed below that line to facilitate reference where needed to the Author Catalog where the complete bibliographic data will be found. The LAC number is also given here as in the other two volumes to permit direct access to and retrieval from the collection file of the title in question. A check of the titles listed disclosed that 57 were of works in French, German, Italian, Latin and Spanish.

5. The Biblioguide Index.

This is a 952-page, well-bound and well-printed volume that was designed as a topical index to permit the locating of information on themes or topics more specific than, or that cut across, conventional subject classifications. Numbering

565, these topics are indexed regardless of whether or not found in whole works, parts of works, or the periodicals included in the collection. The 565 topics are in turn grouped into 29 subject areas or chapters, under each of which appear topics or headings leading to the source citations to be found in the collection.

As the Introduction explains: "Of the 565 topics or headings in the Biblioguide Index, 176 are major headings, the rest sub-headings or sub-sub-headings...."

This volume - not received until mid-July, 1972 - has seen very little use, according to questionnaire returns and LAC user interviews. This disuse is not surprising, in view of the fact that the indexing scheme utilized is rather complicated and therefore difficult and cumbersome to use and explain to others. Nor is the "Introduction" of much help, for it fails to give a clear, explicit, step-by-step account of the method of use. LRI, somewhat belatedly recognizing this deficiency, issued some five months after the original volume was published a four-page leaflet in which is detailed the seven-step procedure required for optimum usage. This information should have, of course, been included in the "Introduction" to the original bound volume.

As a randomly chosen example of the complexity mentioned, suppose that a student from Louisville, Kentucky, without knowing whether he/she has selected one of the "565 themes," wishes to do a research paper on the construction of the canal around the falls of the Ohio River there, and its effect on the growth of the city. As a starting point, the student sets out to ascertain if there are any histories of the city in the collection that might yield information on the topic chosen. Following directions, in the leaflet just mentioned - How to Use the Biblioguide Index - he/she turns to the list of chapters and reads through 16 such subject area headings before coming on one that looks likely: "17.The City." As a subordinate entry beneath that is found "17.3 Histories and studies of particular cities." The student then goes to Chapter 17 which is located on page 501 and finds that

"17.3" is located on page 512. On that page, he/she is required to read the headnote which informs that "Under this heading references are organized alphabetically according to the subject, which appears in boldface at the head of each group of references...." Further on, he/she learns that there is another category "Other cities and towns," the references to which "... are ordered alphabetically by city, the name of which is enclosed in parentheses if it does not appear in the title..." Confronted with this dichotomy and not knowing in which of the two categories will be found the references, the student turns first to the boldface headings on page 513 and goes through Baltimore, Boston, Chicago, Cincinnati then New Orleans without finding Louisville. Going next to the second category, "Other cities and towns," on page 522 the student is required to search, not through boldface headings as before, but through both titles and bracketed (not parenthetical) city names, until on page 525 are found five references to the name of the city sought.

As a consequence of this complexity, the Biblioguide Index requires interpretation of its use to students and others seeking references there. Interpretation, in turn, is clearly a reference function, but skilled reference staff may not always be available in the microform reading area where the fiches, etc., will be located.

Some of these problems might have been avoided had the simple, direct and familiar indexing technique used in the Readers' Guide to Periodical Literature, modified to include whole works and parts of works, been employed here. The result would have been to provide a more comprehensive and more usable key to the contents of the collection than that afforded by the Biblioguide Index.

It might be observed somewhat parenthetically at this point that the student, although he would be unaware of it, has for all his labor been short-changed. Two relevant references in the LAC collection were not listed with the five that were found. In DeBow's Review, v. 14, n.s., no. 1, for January 1853 is found a historical sketch entitled "The City of

Louisville" (LAC #31377). On fiche LAC #13546 is reproduced Gabriel Collins' Louisville and New Albany Directory and Annual Advertiser for 1848 which contains on page 258 the 23rd Annual Report of the President and Directors of the Louisville and Portland Canal Company wherein will be found, among other information, statistics for the years 1831-1847 of the number of boats passed through the canal, their tonnages and the tolls collected.

6. The Shelf List.

This is a reproduction of a computer-type printout which contains the LAC numbers of the abbreviated titles of the fiches in a serial arrangement. The number, of course, appears in the headings on the fiche in the upper right-hand corner and also on the envelope in which it is stored. The LAC numbers are sub-divided into four groups, as follows:

10,000 series - single volume works
20,000 series - multi-volume works
30,000 series - periodicals
40,000 series - pamphlets and short works

Unfortunately, not all numbers are used in each series, as a study of the shelf list discloses. Consequently, it is difficult to maintain the file integrity of the collection of 12,474 fiches. Misfiles are certain to occur and unless such items are located by frequent searches of the entire file, they are unavailable for use. Had all the numbers been assigned to the fiches in a continuous sequence, this check could be made very quickly without even having to resort to the shelf list, except to identify any missing number in the sequence. As it is, the shelf list numbers must be compared laboriously one by one against the fiches, especially in those areas of the number sequence where the breaks occur.

7. The Catalog Cards.

In order to maximize the use of the LAC collection and also to permit the evaluation of all the items of bibliographic support available for use therewith, a set of the optional catalog

cards was purchased and filed. According to the estimate furnished by the GWU Library Catalog Department, which was based on a linear measurement of the cards when received, the set consists of approximately 42,350 cards. The cost for the set was $4,000. While not LC cards, they follow that format with the main entry printed in boldface type, the body of the card through the imprint line in large readable type and the collation, notes, tracings, etc. in much smaller print which, however, as with the LC cards, is readable. No LC call numbers or order numbers are shown. Headings are printed at the tops of the cards, with the subjects being printed in black, upper-case (all-capital) letters. Full sets of cards are supplied for each title in the collection, except for shelf list, which is furnished in book form as mentioned above. The cards were received arranged in sets for each title, and in alphabetical order by main entry. Approximately 150 cards were found to be duplicates and only twelve were so badly printed that substitutes had to be typed for them. No cross reference cards are included in the package, although approximately 495 such entries are found in the book Author Catalog.

Prior to filing the cards in the GWU Library catalog, which is divided into three separate sections - author, title and subject - all cards were stamped with the identifying symbol "Microfiche A7." Thereafter, they had to be sorted, of course, into the three categories for final filing. As of possible interest, the following data regarding pre-filing preparation and filing costs in terms of man hours and materials are given:

Clerical: stamping cards - 80 hours (5 people)
Supervisory - 240 hours (2 people)
Clerical: filing - 950 hours (17 people)
Clerical: identifying and typing 495 cross reference cards - 70 hours

Materials:

4,000 filing flags.....$94.00
12 alphabetizers.....$37.80
12 stamps and pads.....$39.60

After the cards were filed in the public catalog in early June, 1972, one rather serious problem did develop with respect to their use in the GWU Library. The distinctive LAC number, which is used for storage and retrieval of the fiches, is printed in the extreme upper right-hand corner of the cards. However, following GWU Library practice, we have stamped our designator, "Microfiche A7," in the upper left-hand corner of each card where normally a book call number is placed. This designator serves only to identify the LAC as a set and not the individual titles within the set. Users, because they are accustomed to copying book call numbers or other retrieval information from the left-hand side of the card, do not come to the microfilm reading area with the LAC number that is necessary for retrieval of the title sought. Had this number been printed in the left-hand margin of the cards, about 1-1/2 inches from the top, or about where the notation "Microbook Film Card" is now printed, this problem would have been avoided in the GWU Library. Dropping the number down that distance from the top of the card would allow room for the insertion above of locator symbols in libraries using the latter for materials in microtext.

INSTALLATION AND OPERATION

The materials and equipment obtained for use in the G.W.U. demonstration consisted of the following items:

1. One set of the LAC collection, totaling 12,474 fiches.

2. Sixteen sets of the three book catalogs - author, title and subject, with Addendum and Errata - and of the Biblioguide Index. These were distributed as follows:

   2 sets with LAC collection.
   1 set to GW Cataloging Department.
   1 set to GW Acquisitions Department.
   1 set to GW Reference Department.
   1 set to GW History Department.
   1 set to GW English Department.
   5 sets to American Studies Program Department.
   1 set to American University Library Reference Department.

1 set to Catholic University Library Reference Department.
1 set to Georgetown University Library Reference Department.
1 set to Howard University Library Reference Department.

3. Ten sets each of the above book catalogs and Biblioguide Index on ultrafiche.

4. 2 copies of the Shelf List.

5. 1 set of catalog cards, totaling about 42,350 single cards.

6. 3 Microbook 912 table readers. (2 originally received and one added later in December, 1972.)

7. 12 Microbook 710 portable readers.

The fiche collection, together with five author catalogs in book form and two Microbook 912 table readers, arrived in late October, 1971. The fiche came in thirty 3" x 5" file boxes packed six to a large carton, for a total of five shipping cartons. Checking to insure receipt of all fiches was difficult because there were numerous gaps in the numerical sequence, as already noted, and some fiches were not received in numerical order. The publisher, however, provided lists of the unassigned numbers to assist in the inventory.

The check revealed that 17 fiches were missing, 23 lacked the catalog imprint data on envelopes, 16 duplicates were received, as were 10 fiches listed as having unassigned numbers. Most of these problems were later solved by phone calls, correspondence and form letters from LRI. Two copies of the Shelf List were forwarded by LRI in February, 1972, with the suggestion that a final check be made against it to insure that all material listed had been received. Some of the incorrectly imprinted or blank envelopes were replaced in February, 1972.

After putting the fiche collection into a complete and usable state, it was then made available to the public in space set aside in the Special Collections Reading Room where the library's other microforms are housed. Controlled lighting is also available in this area and it is open for use 83 hours per week.

Two table readers were placed on 3' x 5' (later 4' x 5') tables close to wall electrical outlets which had been modified by an electrician to accept the 3-prong power plugs on the readers. This latter modification was made after the arrival

of the table readers, as the requirement was not noted in the advertising, nor mentioned in our negotiations with the publisher.

The fiches were stored in a standard wooden upright card catalog-type cabinet containing 3" x 5" file drawers. The entire collection occupies 54 such drawers half filled and with the rods removed.

On tables nearby are placed the various book-type catalogs, along with the Biblioguide Index volume. At the outset, before the catalog cards became available (early June, 1972) it was necessary for the prospective user to consult the separate book catalogs for author, title or subject to ascertain the fiche number and then turn to the file cabinet to obtain the desired fiche. After use, the student drops the fiche in a tray to be refiled by the staff.

For off-site use with the Microbook 710 portable readers (Portareaders), which arrived on February 4, 1972, the fiches were issued in 8" x 10" clasp-type manila envelopes, along with a copy of the necessary operating instructions reproduced from the instruction booklet. On the outside of the envelope was placed the impression of the Library's property stamp, along with a date due slip. The fiches so circulated were identified on the retained charge-out card by the LAC serial number and as a cross check by the first word or surname in the main entry. The Portareaders were identified by recording their serial numbers on the charge-out cards.

All first-time users of the collection were asked to complete a questionnaire designed to elicit information that might be helpful in determining reader reaction to the demonstration and his/her assessment of the usefulness of the collection. The analysis of the responses to the questionnaires will be given later in this report.

READING EQUIPMENT

A. The Microbook 710 Portareader. (Attachment E)

Approximately 5 lbs. in weight, this reader has a glossy screen 7 1/8" x 10" and has a 75X lens. It was designed as a portable lap reader and was characterized as "the key that will free the Microbook materials for circulation" ("Microbooks, a New Library Medium?" Publisher's Weekly, Nov. 9, 1970, p. 50). The machine, an optional item, is manufactured by Technicolor, Inc., of Costa Mesa, Calif., sells for $165.00 each, and comes equipped with a three-wire electric power cord terminating in a three-pole plug. Although important for off-site use, this fact is not mentioned in the (brown) advertising leaflet issued to prospective customers.

The lamp used in this reader is, according to the operating instructions booklet (p. 8), "...a specially-designed Sylvania projection lamp (DZP-type)," and is rated for 150 hours of life. It sells now for about an average of $7.50 each, if ordered in quantity. .However, despite the statement in the booklet that "replacement lamps are available through Sylvania lamp dealers," this did not prove to be so in the Washington, D. C., metropolitan area. Such lamps must be purchased directly from the manufacturer of the reading machine in Costa Mesa, Calif.

Problems with these readers began to appear as early as the day of their receipt - February 4, 1972. At this time, when the twelve readers ordered were checked, it was found that in one the lamp would not light at all, and in another the lamp blew out as soon as the machine was plugged into the wall outlet and was turned on. In a third machine undergoing testing, the lamp burned for five minutes, blinked and then went out completely, with the fan still operating. Thus on 25% of the machines, lamp replacement problems arose immediately. The manufacturer, Technicolor, replaced them free of charge, even though they are specifically exempt under the guarantee. Meanwhile, of course, the three machines were unusable.

Except for the afore-mentioned free replacements for damaged lamps, attempts to stockpile a supply for replacement purposes from local sources ran into difficulties. The local Sylvania distributors had none in stock, nor did the two area authorized service agencies. So an order for 24 lamps was placed on February 10, 1972, with Technicolor. The shipment finally arrived on August 9, 1972, with no explanation for the long delay. The inspection of the lamps, each of which was packed individually in shock-insulating, plastic air-bubble envelopes, disclosed that three out of the 24 or 12.5% were defective. In the case of one lamp, only half of the glass/quartz capsule that encloses the filament was present, with the other half nowhere to be found. In the case of the other two, the lamps, when inserted in a properly functioning reader for testing, lit up when the power was turned on; then after it was turned off, then on again, refused to re-light. Examination of these latter two lamps disclosed that the pigtail filaments that produce the illumination had broken loose from their moorings between the two current-conducting antennae, this being the same defect noted in the faulty lamps received in the shipment of readers mentioned above.

At the time of arrival of this long-delayed shipment of lamps, the decision had already been reached to return all the portable readers to LRI in Chicago as unsatisfactory. Consequently, the lamps were no longer needed and were returned to Technicolor with an explanation and a request for a refund. This action took place on September 21, 1972, and the refund was received on February 13, 1973.

Apart from the lamp problems, difficulties began to develop early in this reader in the off-site use. The first student borrower complained about having to re-focus from page to page and found it so uncomfortable to use that she could only read on it for one hour at a time. In another instance, the horizontal scan knob pulled loose on its shaft and would not allow the fiche to move out of the case. Another user returned a reader with the complaint that it would no longer focus properly. Another comment recorded in the user log states "Machine 1235B returned defective - horizontal knob not advancing film. LAC 40089 caught inside..." This was another instance of the horizontal scan knob coming loose on the shaft. Again from log: "Machine 1228B returned - defective - no power." "Machine 1226B returned - horizontal knob not working - fiche LAC 13291 stuck inside." "Machine 1231B returned - defective - overheats."

At this point when additional complaints of overheating and buckling or puckering of the Mylar laminates encasing the fiches began to filter in, all fiches previously circulated for use in this portable reader were examined and most were found to exhibit signs of some damage. All twelve portable readers were recalled and withdrawn from further circulation when tests showed that the overheating problem was common to all. Discussion was then had with LRI headquarters in Chicago about this problem and information was received that the manufacturer - Technicolor - would shortly supply a new lens adapter which was expected to take care of the problem. The other problems, as failure of the focusing mechanism and the loose horizontal scan knobs, were discussed at the same time and it was agreed that they should be handled by the local authorized service agency under the warranty. This was done, but meanwhile the affected machines were unavailable for use.

On April 24, 1972, approximately two weeks before the close of our Spring Semester, the LRI engineer came to Washington to install the new lens adapters, to check all the readers, and to correct the focus malfunction problems in two of the readers and the power failure in another. He rejected four of the machines as defective for a variety of reasons (uneven illumination (2), a noisy fan with a bad bearing (1), and fiche holder broken (1)) and suggested their return to the factory as unsatisfactory. Upon his return to Chicago he promptly shipped six replacements.

Thereafter, even though the installation of the new lens adapter seemed to remedy the fiche puckering problem, the focusing mechanism breakdowns continued to occur, along with the loosening of the horizontal and also occasionally of the vertical scan knobs, and other problems. At this stage, the conclusion was reluctantly reached that the 710 portable readers were completely unsatisfactory for library use, primarily for the following reasons, and would have to be returned:

1. Lack of sharpness of image on screen and frequent re-focusing from page to page required. (It is suggested that the frequent re-focusing required, which is more than that of the 912 table reader, may be due in part to the use of the rubber roller fiche transport mechanism in the 710 portable reader instead of the usual glass flats such as are found in the 912. As a relatively cool frame of film moves into the hot spotlight in the 710 where it is in suspension between the two pairs of rollers, it has sufficient play to allow the normal amount of expansion produced by the heat to move it toward or away from the lens slightly but sufficiently to fuzz the focus, whereas in the 912, the fiche being clamped between two glass plates, which themselves may dissipate some of the heat, has less freedom of movement in and out of the focal plane and thus tends more or less to stay in focus under such conditions.)

2. Glossy screen surface produces eye-straining ambient light reflections and exhibits distortions in areas where pressure clips hold the screen in the frame inside the case. (It is suggested that reversing the screen so that the non-glossy or matte side is turned outside, instead of inside the case as now, might eliminate or reduce the reflections, although admittedly this might result in some degradation of an already none-too-sharp picture. Also, the use of a stiff wire retaining ring instead of the clips to hold the screen in its frame inside the case might, by more evenly distributing the stress, eliminate the distortions.)

3. As issued, the reader came without a carrying case to protect the soft screen surface from scratches and the entire device against damage from rain or other inclement weather incurred in take-home use.

4. Frequent breakdown of fine focusing mechanism.

5. Frequent malfunction of vertical scan knob. (In one case both horizontal and vertical knobs became inoperative simultaneously.)

6. Frequent loosening of horizontal scan knobs preventing them from moving the fiche.

7. Frequent trapping of fiches inside case, making it impossible to retrieve them until the reader cools off. This happens even in those machines equipped with the new heat-dissipating lens adapter.

8. Vertical smudge marks (possibly from overheated rubber transport rollers) are deposited on fiche which remain stationary in machine for short periods of time. (It is suggested that 6, 7, and 8 are all problems which may be caused by the accumulation of excess heat in the case. As the heat builds up to the point where the fan and small vent can no longer cope with it, the excess causes the close-fitting rubber fiche transport rollers to expand and in the process to become too tight to allow the fiche between them to advance or retreat. This in turn causes the user to put unusual strain on the horizontal scan knob to attempt to retrieve the locked-in fiche and thereby to break loose the set-screw on the drive shaft. In addition, this excess heat is apparently causing a decomposition of the rubber/plastic transport rollers and the decomposed particles are being deposited on the fiche as vertical black smudge marks. Apart from the undesirability of having these removable but disfiguring smudges on the fiche, is the fact that the undue acceleration of the roller decomposition caused by the excess heat will tend to unnecessarily shorten the useful life of the transport rollers.

   It was suggested to the LRI engineer and other LRI officials that these apparent heat-related problems could probably be solved by cutting with an electric sabre saw a number of slots in the bottom and top of the back of the case to permit normal air convection currents to assist the overworked fan in evacuating the excess heat now trapped inside the case.)

9. Uneven illumination of screen. (Perhaps a lamp adjustment procedure similar to that used in the table reader is needed.)

10. Horizontal shallow scratches are imparted to the fiche as it moves back and forth between the transport rollers. (Tests and observations in usage indicate that these scratches, which will in time tend to reduce the readability of the microscopic page images on the fiche, are caused by grit and dirt which is transferred from the fingers of the fiche user, or others handling them, via the fiche surface to the rubber transport rollers where it becomes imbedded and thus forms an abrasive surface over which the fiche travels. No instructions are given in the operating instructions booklet about the need for

and the method of cleaning these rollers periodically. The abandonment of the easy-to-inspect and easy-to-clean conventional glass plates fiche carrier mechanism in favor of this roller concept seems to have introduced unanticipated problems.)

11. The machines do not bear the Underwriters' Laboratories seal, so their electrical safety as determined by the tests performed by that agency is unknown.

12. The readers come equipped, as stated earlier, with 3-pole power plugs, whereas none of our users had corresponding 3-hole outlets in their quarters. The operating instructions booklet offers no help on this problem, merely saying, "Be sure to use a three-hole receptable to insure proper electrical grounding" (page 3). When this matter was called to LRI's attention, it was suggested by their engineer that the readily obtainable "pigtail" grounding adapters be employed to permit the use of the three-pole plugs in two-hole outlets. But proper use of these requires that the green "pigtail" be attached to the screw holding the wall plate onto the wall outlet box. Thus, library staff is put in the position of trying to instruct the would-be user in the technique of grounding the "pigtail," and issuing a warning to be careful not to let the screwdriver blade slip inadvertently into the activated slot in the wall receptacle etc. Obviously, such people cannot and should not be expected to assume this responsibility. Moreover, effective grounding of the "pigtail" results only if the metal conduit for the circuit is properly grounded. This is obviously something that only an electrician should determine.

    The counter-suggestion was then made by the LRI engineer that the green "pigtail" safety ground wire be clipped from the adapter. Doing this, of course, defeats the very purpose for which the third pole was put on the plug in the first place - grounding the machine in the event it becomes inadvertently energized, to reduce the shock hazard to the user.

    By way of contrast, the following notice came on the cards accompanying the 912 table readers:

"For your protection this product is equipped with a 3-wire power cord that grounds the unit when the plug is installed in the power receptacle. If by necessity an adapter must be used, the green grounding wire of the adapter must be connected to a good ground in order to maintain the protective function." The notice fails to inform how to ascertain if the "good ground" exists, however.

In this connection, the National Association of Home Appliance Manufacturers estimates that 80% of the 15- and 20-ampere outlets in use in homes today are not properly grounded, and discourages the use of pigtail adapters. (Consumer Reports: The Buying Guide Issue, December 1972, v. 37, no. 12, page 182.)

(Under the circumstances, it would appear that for safety's sake in the off-site library situation, the use of a low voltage self-contained lightweight rechargeable battery kit would have to be explored as a source of power for this reader.)

13. The machine comes equipped with a "silent" lamp-cooling fan. The user is instructed: "Do not operate reader if fan does not start." (Operating Instructions Booklet, p. 3.) Presumably this injunction also applies in the event of fan failure during operation, but the possible consequences in either case are not mentioned. However, certainly overheating and a possible fire hazard may exist. It is unrealistic to expect a student reading the text on the screen to be constantly alert to the operation of a "silent" fan. Moreover, in off-site use, as in a dormitory, for instance, it is not clear what might happen when the student walks out without turning off the power and leaves a lighted reader surrounded by papers, notes, match folders, and other flammable materials and during this period of absence the fan burns out a bearing or for other reasons ceases to function. Or, to give another illustration, a tired student falls asleep while reading in bed and leaves the power turned on and the fan fails. The use of the reader in such cases is not without some risks - both to the individual and legally to the issuing institution. (To prevent such accidents from occurring it is suggested that readers for off-site use be so wired that a fan failure would interrupt the flow of current to the machine and thus nullify the hazard.)

14. The brown, one-page advertising leaflet, states that the machine has a "mechanically detented two direction fiche transport mechanism with fine tune override," using phrasing identical to that used to describe the 912 table reader in a similar brown leaflet. On the 710 portable reader no such detent mechanism could be found.

15. The 710 reader came advertised as a "lap" reader. As a matter of fact, because of the heat inside the case, its use in such a position for more than 5-10 minutes at most would become uncomfortable. This is not surprising when it is observed that the exhaust ports designed to remove the heat emitted by the lamp have been placed on the back of the machine exactly where it will rest on a knee or thigh in a lap reading position. In addition, persons wearing shorts and sitting with bare feet on the ground floor of a basement apartment, might not only find that the reader in their lap was uncomfortable but also hazardous as well should they inadvertently spill liquid on an active machine in such manner that they themselves become part of the electric circuit.

16. The lamp bulbs furnished in the machine, as well as those received separately, are too delicate and fragile for use in a portable reader. This is attested to by the fact that three defective lamps were received in the 18 machines shipped by LRI from Chicago, and three such in the separate shipment of 24 bulbs from Technicolor. Thus 6 out of 42, or one out of 7 bulbs was defective on receipt, whether in a reader or packed separately. Obviously, if they cannot withstand the minor jars of handling and shipment in the well-packed, shock-insulating materials and cartons used in both instances, their successful library use in portable, take-home readers, where they are subject to much rougher treatment, is dubious at best. Moreover, the factory warranty indicates that the lamps are not guaranteed.

17. The manufacturer's "Warranty" on this reader states in part, "This Microfiche Reader is warranted to be free from defects in materials and workmanship for a period of ninety days from the date of delivery." Further along, however, it continues, "This Warranty does not extend to (i) damages to a Microfiche damaged by this Microfiche Reader, (ii) lamps, and (iii) shipping charges..." The most important part, which is emphasized by being printed in capital letters,

reads as follows: "THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY FURTHER EXPRESS OR IMPLIED WARRANTIES BY ANY PARTY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY OTHER OBLIGATIONS TO THE PURCHASER." (Attachment F)

So far as the manufacturer, Technicolor, Inc., is concerned, the reader is not guaranteed to do the job for which it is being sold by LRI. The purchaser is left largely unprotected by the terms of this manufacturer's "Warranty." However, the LRI operating instructions booklet which accompanies each reader begins with a statement of purpose, as follows: "The Microbook Model 710 Portareader is designed to project the pages of the Microbook film card, enlarged 75 times, on a 7 1/8 by 10-inch screen for easy, comfortable reading." In view of Technicolor's disclaimer, it would seem that LRI should offer their own written guarantee of satisfaction. But this is not the case, for LRI merely quotes on page 10 of the same booklet the full text of Technicolor's "Warranty," and affixes that firm's name to the end of the quotation. The closest LRI comes to accepting such responsibility is found in the statement at the bottom of the last page (16) of the booklet which reads: "If any unusual problems arise in connection with your Portareader - or if you have difficulty in obtaining satisfactory service - call Library Resources' Customer Service Manager, collect," with the name and phone number to call appended. This statement, however, can hardly be considered a suitable substitute for the specific terms of a written guarantee of satisfaction or money refunded by LRI. It should be emphasized again, however, that in the GW demonstration, when the entire lot of 710 Portareaders was returned as unsatisfactory, LRI refunded the full purchase price.

The withdrawal from use at the end of the spring semester in early May, 1972, and later return of these portable readers resulted, of course, in restricting the fiches to on-site use with the only available remaining reading equipment - the large Model 912 table reader.

LRI replaced free of charge all fiches damaged in the readers.

B. The Microbook 912 Table Reader. (Attachment G)

Weighing 52 lbs., this machine has a non-glossy screen about 8 1/2 x 12 inches and a magnification ratio of 90 times. It is manufactured by the Dukane Corporation of St. Charles, Illinois, and sells for $450.00 each. The lamps used in this reader are of the standard FCR-type, cost around $9.00 each retail, and have, according to the LRI instruction booklet, a standard life of 250 hours, although the Sylvania carton in which each lamp is shipped gives the figure "50 hrs." Generally speaking, users found this reader fairly comfortable to work with, even for several hours at a time. However, some difficulties did develop in its use and other faults were disclosed by experimentation, as follows:

1. Insertion and withdrawal of the fiche between the glass plates (or "flats") resulted in vertical scratches appearing on the outer (front) plastic laminate cover of the fiche. This operation, repeated 5 to 20 times, produced scratches, first on the outer edges and then on the areas between, all of which contain photographic images. These abrasions eventually make it difficult or impossible to read the words and textual fragments beneath them. A close study of the steps followed in this loading-unloading operation indicates that the abrading is brought about by a forward flexing of the fiche which causes the soft plastic cover to rub against the inside upper beveled raw ground glass edge of the front plate. Such flexing is necessary for loading and unloading, despite the directions given in the instruction booklet which illustrates an impossible way of vertically inserting the fiche. (The booklet substitutes an artist's sketch for an actual photograph of the fiche carrier that would show the overhanging superstructural frame member obstructing free vertical access to the glass flats loading area.) (Attachment H)

   This abrasion problem was brought to the attention of the LRI engineer during his visit to the George Washington University Library on April 24, 1972, and the suggestion was made to him that these rough edges on the plates should be rounded off and polished. He rejected the proposal because of the supposed cost of $50.00, and later sent two additional plates as replacements. Tests showed that the new plates continued to scratch the fiche at almost the same rate as their predecessors.

At this point, the two front plates from the two readers were taken locally to a plate glass window replacement firm for rounding off and polishing of the scratch-producing edges in the center of the plates, and to an optician for rounding off and polishing the two outside edges, since neither could do the entire job. This was done at a total cost of about $10.00 per plate. After testing, the improved plates are believed to have reduced the scratching to an irreducible minimum.

In addition, it is to be noted that inevitably a certain amount of unnecessary scratching of the soft Mylar fiche cover will come about by virtue of the fact that the user will, by failing to put the proper pressure on the "Press to Load" bar, not completely separate the glass flats, particularly in the unloading step. Some of this abrasion might be reduced by relabeling the bar "Press to Load and Unload," but the trouble could have been avoided had the machine been equipped with the automatic flat separation feature for loading and unloading that is found on many conventional microfiche readers.

2. Because the fiche carriage assembly comes out of the machine at an upward angle, it necessarily has a locking mechanism to prevent it from sliding downward while loading or unloading. It is difficult to return the loaded fiche carrier into the machine unless it is first pulled toward the user and then pushed away with a sharp jolt to disengage the locking mechanism. No mention is made of this difficulty in the instruction booklet, nor how to overcome it. In addition, such jolting is not conducive to long lamp life, especially if the lamp is lighted at the time, as it might well be in the case of changing from one fiche to another. The carton in which the lamp is packed has a note that cautions: "Avoid rough treatment to the projector while lamp is lighted. Do not bump or bounce projector."

3. The thumb cut ("insertion trough") in the glass plates is rather shallow and causes people with short or no fingernails to have some difficulty in extracting the fiche.

4. The detent mechanism, which is supposed to center the pages and/or the rows automatically once they have been set manually by the detent override, seldom does that for more than a few pages. The earlier (now superseded) brown cover instruction booklet mentions this shortcoming in a passage deleted for some reason in the later edition when it states, "Because of variations in book page sizes, formats and margins, the detenting mechanism may not always provide a properly centered image on the viewing screen. Adjustments in the centering of the image are easily made by pushing in on the Scan knobs and turning them."

5. Concerning the use of the machine, this superseded instruction booklet warns the user, after turning on the power, to "Check that the fan is operating by feeling at the top of the ventilation grille at the top of the cabinet. Do not continue to operate the machine unless the fan is operating." The newer current booklet (blue cover) merely warns, "Screen should light; air should blow through air vent on top of the reader. Do not operate reader if cooling fan fails to start." While the damage resulting from failure to follow these latter instructions is left unmentioned, presumably it could occur equally at the inception of, or during, reader use. The earlier, superseded instructions which refer to checking while continuing to operate the machine are therefore more apposite.

   Moreover, in a library situation, this attempt to impose on the student the responsibility of remaining constantly aware of the fan operation while he/she is trying to concentrate and perhaps take notes about the text viewed on the screen, is impractical. What is needed here, perhaps, is a safety device, such as a ruby warning light or electric-power-interrupting circuitry to alert the user in the event of a fan failure during operation.

6. Another problem that developed in the use of this reader involved the "Press to Load" bar. One heavy-fingered user pressed the bar too strongly in the center where instructed and

bent the bar inward at that point. This action in turn caused the two hanger strips to which the bar is attached to buckle forward and catch on the edge of the loading window frame, thereby preventing the fiche carrier from moving beyond that window into the carrier assembly in the proper position for viewing. This damage was corrected by removing the bar assembly and bending the "Press to Load" bar back to its original flat state. However, if in the manufacture of this item the lower edge of the bar were to be bent inward at right angles to match the upper edge which is already so bent, sufficient rigidity should have been imparted to it to prevent such accidental damage, and perhaps in the process to obviate the need for a costly service call.

7. The students found that re-focusing from page to page was required, although not so often as on the 710 portable reader.

8. The 912 readers come equipped with 3-pole power plugs, but in on-site use this did not prove to be a great problem, although it did require the installation by an electrician of matching 3-hole grounded wall receptacles to accommodate them.

9. After considerable usage, the plastic horizontal scan drive belts tend to jump off their toothed wheels, but with readjustment of the tension on the belt drive mechanism, the problem was corrected.

10. Lamp replacement on the 912 is rather easy. However, following the instructions in the operating booklet for adjusting the screen illumination may be hazardous in some cases. The operator is told to "...place the blade of a metal screwdriver with a wood or plastic handle alongside the (lighted) lamp near its top," and "while observing the screen gently move the lamp to one side then the other until the screen is evenly illuminated." Some screwdrivers, such as those sold with interchangeable blades, have adjustable metal chucks at the bottom of the plastic handle, and this metal of course should not be touched while making such adjustments. Other available screwdrivers have a metal

one-piece blade which extends upward completely through the wooden or plastic handle. Such a tool would have the metal shaft exposed in the palm of the hand during the adjustment operation. Breakage of the lighted lamp while being moved by such tools might result in electrical shock to the person making the adjustment. Another potential for such shock and/or machine damage exists in the area at the base of the lamp where the current-conducting prongs fit into their exposed all-metal socket strips. Regardless of the type of screwdriver used, the person making this adjustment runs the risk of inadvertently touching one of these strips with the metal blade, or even bridging the narrow gap between the sockets, and creating a short circuit at that point. The likelihood of this taking place is increased by the fact that the operator's left hand must hold the tool to move the lamp, which is located on the left-hand side of the case, while he tries at the same time to check the evenness of the illumination on the screen. These dangers in the use of the tool are even greater in a library because students or other unskilled staff members may be called upon to change lamps and make this adjustment. Under the circumstances, it would seem to be desirable for the manufacturer to provide a suitable tool made of heat-resistant and dielectric materials, that could safely be used for the purpose.

The guarantee covers defects in material and workmanship for one year, but exempts film which is damaged, as well as the lamp.

C. The Reader-Printer.

Although promised and re-promised for delivery on various dates, this machine for making enlarged paper prints from the fiche had not materialized as of the close of the demonstration project on December 31, 1972. Several of our users expressed dissatisfaction with the lack of such a device, and undoubtedly there is a need for one.

COLLECTION USAGE

Comprising a collection that has been amassed since early in the nineteenth century, the George Washington University Library's holdings number some 400,000 volumes. In an effort to ascertain the degree of duplication between them and the 9,620 titles in the LAC collection, a check was made in the GWU Library public card catalog of 500 titles selected at random from the LAC Author Catalog. Fifty-six duplicated titles were noted, or 11.2 per cent.

Thus, a good potential for use of the LAC collection existed not only because of the paucity of books in the area covered by it but also, as mentioned earlier, of the strong, ongoing American Studies program at the George Washington University.

To translate this potential into actuality, however, required, in addition to the steps taken to publicize the availability of the LAC collection in the library, close cooperation from all to whom that publicity campaign was primarily addressed - faculty, students and library staff. It was necessary for the faculty to make assignments requiring the use of the collection and then to refer the students to it for the materials needed to complete such assignments. The library staff, especially those concerned directly with assisting the students in the use of the various book catalogs and the associated reading equipment, had the additional duty of exercising tact and patience in giving such guidance to overcome any "reader resistance" that might arise.

That such cooperation did, in fact, take place was confirmed by the actual use made of the LAC, in spite of the slow deliveries of the subject catalogs (received on March 8, 1972, six weeks after the GWU Spring Semester began), the catalog cards (in April-May), the Biblioguide Index (in mid-July), and the development of numerous difficulties with the portable readers. During the period from January 1st to May 31, 1972, which included the Spring Semester (January 24-May 13), seventy on-site transactions were recorded by the staff attendants at the duty station just across the aisle from the LAC reading area. According to the circulation records of off-site use, which was impeded throughout and finally halted at the end of the semester by frequent portable reader breakdown, in 20 separate transactions, 81 fiches were circulated to 10 different users. During the summer months from June 1 to August 31, fifty-six on-site transactions were noted, with no off-site use because of the withdrawal from use of the portable readers. From September 1 through December 31, the usage, then also restricted completely to the on-site type, leaped to 365 transactions. Thus, counting the 20 separate off-site transactions as instances of use, the total for the calendar year sums up to 511.

The upsurge in usage in the last quarter of the year was determined by the questionnaire and interviews to be due in large

part to the fact that by that time the users by consulting the cards in the public catalog were becoming increasingly aware of the availability in the LAC of the titles they sought. Other factors indicated by the same sources as contributing to this increase were the availability of the various book catalogs to the students and faculty members in the American Studies, the History and the English departments where copies had been deposited, and the advertising resulting from the bulletin board flyers that had been similarly distributed to interested departments. Hence it is concluded that the funds expended for the printing of the flyer, for the purchase and filing of the catalog cards, and of the extra copies of the book catalogs paid good dividends in terms of increased usage.

Aspects of usage other than purely statistical were explored by means of the questionnaires. These were administered to all first-time users of the collection. Two slightly different forms were issued, one in the spring and summer sessions and the other in the fall. Some thirteen questions were listed requesting information about school affiliation; level of study; major field of research; means whereby availability of LAC collection was ascertained; LAC fiches used; course of study connected with such use; if ever used microforms before; problems, if any, with reading equipment; what, if any, items of bibliographic support were consulted; length of time spent at the viewer; purpose in consulting the collection; whether felt that having access to collection was of substantial help; and finally to give comments.

A total of 117 questionnaires was received, 43 in the spring and summer and 74 in the fall. There were 93 undergraduates, 21 graduates, 2 faculty and one non-degree respondent in this total.

All except one respondent reported GWU affiliation, the exception being a holiday visitor from the University of Pennsylvania. Although copies of the book catalogs and the flyers were distributed to the other four D. C. Consortium libraries - American, Catholic, Georgetown and Howard - no evidence of usage by their students or faculty, who were limited to consulting the LAC collection on-site at The George Washington University Library, was reflected in the questionnaires. Telephone interviews with their reference librarians, to whom the catalogs had been sent, confirmed this lack of use by their patrons.

The major fields of study ranged over 51 areas with American Studies and civilization not unexpectedly showing the greatest response. Likewise, fifty-one different courses of study were represented. These embraced, among others, architecture, art, anthropology, education, journalism, American literature, Black history, religion, business administration, etc.

Up to the end of the first semester, with only the book catalogs available, the source of knowledge about the existence of the collection was from library staff members and faculty. However, after the catalog cards were placed in the main public catalog in early June, this source altered radically to show that 68% of the respondents were learning about the collection by consulting those cards, and to a lesser degree from their professors, from the library staff members, etc. There is sufficient evidence in the responses, taken together with information elicited in the interviews, to permit the following conclusion to be drawn: The availability of the LAC cards in the public card catalog not only increased the usage of the collection but also extended that usage to fields of study not previously exploited by the other forms of publicity.

The respondents were about equally divided as to whether or not they had previously used microforms. The reading equipment problems are discussed elsewhere.

The printed book catalogs were consulted as follows: author- 45 times, title- 30 times, subject- 53 times and the Biblioguide Index- 5 times.

The length of time spent at one sitting at the table (912) reader averaged out to 64 minutes, whereas on the portable (710) viewer it was 30 minutes, according to responses and interviews concerning these matters.

Regarding the purpose for which the collection was used, the majority, 64% of the respondents, indicated that they did so to enable them to write a paper. Others to a much lesser extent used it to consult primary sources, to verify a reference, for collateral reading, for extensive reading of a complete work, or to answer a reference question.

Of the 113 responding to the question as to whether or not they felt that it was of substantial help to them to have access to the collection, 107 responded affirmatively and 6 negatively.

Twenty-four patrons out of the 117 submitting questionnaires exercised the option of commenting on the collection. Some of the more insightful and informative remarks appear below:

"Very helpful. Easy to use and much more accessible than most data." (From a graduate student who had used microforms before.)

"Just to say that it has been very helpful." (From an undergraduate who had used microforms before.)

"This microbook business is a godsend." (From a graduate student who had not used microforms before.)

"Much more convenient than the Library of Congress[1-1/2 miles distant] and having a lot together in one place on American Civilization makes working in two subjects - history and literature, for example - much easier and faster. I like having access to documents and periodicals which otherwise would be hard to obtain." (From an undergraduate who had used microforms before.)

"I appreciated the helpful assistance...a table by the machines to take notes on would be useful." (From a graduate student who had used microforms before.) (Larger tables were subsequently provided to solve this problem.)

"A collection of this sort seems invaluable to a department like American Studies that is new and has a very small collection of its own, and to supplement the library's frankly weak holdings in the American Studies field. Especially since a new library will be opening soon, I think much greater emphasis should be placed on the microfilm type collections the library holds, and they should be built up in the other fields." (From an undergraduate who had used microforms before.)

"I'd just like to say that the system seems most desirable for safe storage for vast amounts of books in limited space. The equipment [table reader] is easy to use." (From an undergraduate using microforms for the first time.)

"...Vertical and horizontal scan [on the table reader] does not always advance the same distance causing readjustment in order to read the next page...focusing is a constant problem. Eye strain is the worst set back of this system. I routinely read two hours at a sitting before a break, but fifteen minutes with a viewer is like an all day reading exercise...." (From a graduate student who was a prior user of microforms.)

"I am doing a paper...and could not find adequate information at the D. C. Public Library (Martin Luther King Branch). Using this LAC collection has certainly helped me in completing this paper and I will undoubtedly use it again in the future." (From an undergraduate using microforms for the first time.)

"It was simple to locate and use the materials involved. I think it is a really good addition to the library." (From an undergraduate using microforms for the first time.)

"It would be of great assistance to have a machine that would copy selected pages from microfiche." (From an undergraduate who had used microforms before.)

"I found it easy to use and also fun. But more important, I was able to do reading out of books that would have normally been checked out...." (From an undergraduate who had not used microforms before.)

"The collection is very fine and should be expanded." (From an undergraduate who had used microforms before.)

"Focus [on the table reader] has to be adjusted frequently; otherwise completely satisfied...." (From an undergraduate who had used microforms before.)

"Very convenient to have material available and set up like this, plus the room is pleasant to work in - important to me - No worrying about the book being out or in the wrong place. Great way to do research!" (From an undergraduate who had used microforms before.)

Under the circumstances, it is felt that the usage during the demonstration period was very good but that it could have been better had an adequate supply of satisfactory and properly functioning portable readers been available for off-site use. After the rejection and return of the 710 portables, usage on the two table readers remaining increased to the point that a third had to be purchased to relieve the congestion.

COLLECTION EVALUATION

Although no attempt was made to evaluate the LAC collection as such, some steps were taken to develop information regarding it that might be helpful to libraries desirous of making such an assessment.

One of these involved the checking against a standard bibliography of the titles in the LAC collection. Chosen for this purpose because it covers the same area as the LAC - all aspects of American civilization - was the following work:

> U.S. Library of Congress. General Reference and Bibliography Division. A guide to the study of the United States of America: representative books reflecting the development of American life and thought. Washington, GPO, 1960.

Although there are 6,487 numbered entries in this annotated bibliography, 485 of these are individually numbered author biographical items. Deducting these latter from the total provides a list of 6,002 title entries for comparison with the LAC collection. The check of the titles listed in the LAC Title Catalog disclosed that there were 350 (or 5.8%) identical editions of LAC titles to be found in the Guide. It must be observed, however, that the LAC is largely, though not completely, confined in its selection of photographed titles to those published up to the outbreak of World War I (1914), whereas the Guide has a cut-off date of 1955 with some exceptions. A further check of

the Guide listing itself disclosed that only 912 titles, or about 15%, had imprints falling within the self-imposed time span of the LAC, and therefore the bulk - 85% - were from 1914 onward.

By way of contrast, despite its announced cut-off date, the LAC collection does include imprints from 1914 onward. It was determined that these number 1,051 of the 9,620 titles for a percentage of 11%, with the remainder - 89% - representing the pre-1914 ones. These LAC figures, of course, represent the reverse of the chronological emphasis found in the Guide listing. It was noted during the course of the title check of the LAC against the Guide that, though some titles, particularly literary works, are found in both places, the Guide tendency is to prefer more recent editions which often contain prefatory and critical remarks lacking in the older editions reproduced in the LAC collection.

The selection of 1913 as the cut-off date was dictated - one assumes - primarily by copyright considerations. Since the maximum life of a U.S. copyright is 56 years (28 initially and 28 more if renewed) and since work on amassing the LAC materials began in 1969-70, the choice of that date would permit the unfettered reproduction of all titles selected that bore imprints of 1913 or earlier. Unfortunately, though, the effect of such a constraint was the omission of the works of virtually all modern American literary figures, as well as of such important landmark books as Charles and Mary Beard's The Rise of American Civilization, Vernon Louis Parrington's Main Currents in American Thought, The Cambridge History of American Literature, Spiller, Thorp, Johnson and Canby's Literary History of the United States, and Van Wyck Brooks' The Flowering of New England, to name only a few. As a consequence, the items in the LAC collection consist mostly of the older materials: first editions of the collected works of writers of the nineteenth century, as well as older historical works, treatises, periodicals, pamphlets, and so on.

These findings should be borne in mind in any attempt to determine whether the LAC has fulfilled its promise to become "a collection of materials that would be fully adequate to support an undergraduate American studies program in colleges and a masters program in American history in most universities." (Biblioguide Index, Introd., p. 1).

Other steps taken to provide information useful in the assessment were checking on the number of incomplete sets of multivolume works and the number of reprints photocopied in the LAC collection. It became obvious shortly after the receipt in October 1971 of the original fiche collection that efforts were then being made to fill in incomplete sets that had been reproduced on the fiches, since new fiches containing the complete sets were being issued as replacements from time to time, and later the Author Catalog Errata leaflet was published to show

the new, corrected holdings. Still incomplete, however, according to the revised entries in that leaflet, are the Archives of Maryland (v. 3 wanting), the Historia general de los hechos... of Antonio de Herrera y Tordesillas (v. 5-7 wanting), The Outlook (v. 59 and 71 wanting), The Port folio (v. 5 wanting), and The Southern Literary Messenger (v. 22 wanting). Other incomplete sets noted in the Author Catalog are: The Works of Francis J. Grimke (v. 1 wanting) and The Writings of Henry David Thoreau (v. 2 - Walden - wanting). LRI informed by letter that fiche LAC 23863 for the missing Grimke volume and LAC 31109 for the missing Southern Literary Messenger item have been deleted from the LAC collection.

With regard to reprints, 97 instances (or about 1% of the titles) of the use of such in lieu of originals were noted in the LAC fiche collection. Most of the reprints used in the photographing are of recent issue and are from the reprint houses of well-known reprint publishers, such as Johnson Reprint Corp., Kennikat, Kraus, AMS, Arno, Gregg, Da Capo, Peter Smith, Burt Franklin, Augustus M. Kelley, Books for Libraries, and others. Almost one third - 30 - of the cases noted involved fiche reproductions from reprints issued by the Negro Universities Press.

So far as the method of selection of titles for inclusion is concerned - a matter that is touched upon in the preceding reference as well as in the sales brochures - in the final analysis it would seem that it is more important to know what was finally chosen rather than how it was done. Therefore, any attempt to evaluate the potential usefulness of the LAC collection to any given library could, perhaps, best be done by closely studying a borrowed copy of the Author Catalog, since in that volume will be found all the bibliographic data required to assist in arriving at some determination in that regard.

ATTACHMENT A

THE GEORGE WASHINGTON UNIVERSITY LIBRARY

2023 G Street, N.W./Washington, D.C. 20006

A N N O U N C E M E N T

THE GEORGE WASHINGTON UNIVERSITY LIBRARY WISHES TO CALL TO YOUR ATTENTION THE FACT THAT THE COLLECTION DESCRIBED BELOW AND PRODUCED BY AN ENCYCLOPAEDIA BRITANNICA SUBSIDIARY, LIBRARY RESOURCES, INC., IS NOW AVAILABLE IN MICROFICHE (SHEET FILM) FORMAT, ALONG WITH THE REQUIRED READING EQUIPMENT AND THE ASSOCIATED BOOK CATALOGS, IN ITS SPECIAL COLLECTIONS DEPARTMENT, ROOM 503, TELEPHONE 676-7497.

THE LIBRARY OF AMERICAN CIVILIZATION, the first in the Microbook Library Series, was published in 1971. Containing 6,000,000 pages and approximately 20,000 volumes, it is made up of carefully selected materials on all aspects of American life and literature, covering every period up to the outbreak of World War I. It includes the important points of view reflected in American writings - from those of the framers of the Constitution to those of Indians, Negroes, and other groups that have played such an important part in the shaping of American society.

The LIBRARY OF AMERICAN CIVILIZATION contains the most significant 20,000 volumes out of the total material in its field - more than 300,000 titles published in the United States up to 1914, in addition to periodicals and government documents, and materials of foreign origin bearing on this country. The selection is based on the widest possible view of American civilization. Analysis of the principal bibliographies of American civilization, literature, and history shows that an outstanding collection can be encompassed in a library of about 20,000 volumes.

The Library will be extremely useful in courses on the history of the United States. It is designed to bring out every aspect of this history - political, economic, social, cultural, scientific, and technological. The Library will also find heavy use in departments of English and American literature. In other subject areas, the Library will help maintain links with the past: in government, economics, and law, by showing origins and development of our modern system; in drama, dance, music, and other arts, by reminding the student of older themes and treatments.

For future teachers the Library can provide a strong foundation in American studies and the history of the development of American education.

ATTACHMENT B-1

THE GEORGE WASHINGTON UNIVERSITY
Library Journal

Volume 5, Number 1 September, 1971

UNIVERSITY LIBRARY RECEIVES MICROBOOK LIBRARY GRANT

The National Home Library Foundation of Washington has awarded the University Library a grant of $40,000 to install a set of the Encyclopaedia Britannica's ultra-fiche "Library of American Civilization" with all available associated equipment and bibliographic support. The Library is to make the resource known to a wide local audience, and to permit its use both on and off-site during the year 1972. From its evaluation of the demonstration, the Library hopes to develop information of help to other libraries in gaining maximum utilization of book resources in ultra-microfiche form.

The "Library of American Civilization" is the first of a number of series planned in the ultra-microfiche format by EB. It consists of approximately 13,500 3"x5" microfiches containing about 20,000 volumes of monographic and journal titles covering all aspects of American life up to the outbreak of World War I. Its installation at GW will be accompanied both by printed catalogs of the collection and by a regular set of catalog cards for each of the 13,500 titles in the collection, as well as by table readers, a number of portable readers, and by a reader-printer for those users desiring hard copy.

The one-year demonstration is due to begin on January 1, 1972. The collection and the equipment for its use will become the property of The George Washington University Library.

ATTACHMENT B-2

THE MONDAY REPORT

The George Washington University

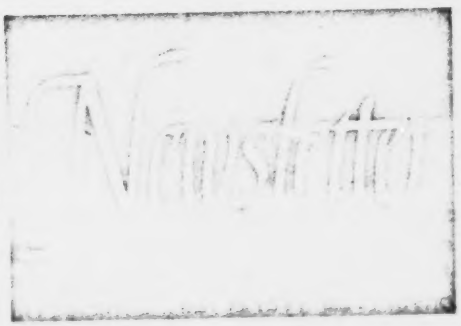
Published by the Office of Public Relations
Mary Kidder and Roger Morris, Editors

Monday, October 4, 1971

LIBRARY RECEIVES MICROBOOK LIBRARY GRANT--- The library has received a grant of $40,000 from the National Home Libary Foundation of Washington to install a set of the Encyclopaedia Britannica's ultra-microfiche "Library of American Civilization." The library will make the collection available to the community during 1972. The "Library of American Civilization" consists of approximately 13,500 3 x 5 microfiches containing some 20,000 volumes of monographic and journal titles covering all aspects of American life up to World War I. Its installation at GW will be accompanied both by printed catalogs of the collection and a regular set of the catalog cards for each of the 13,500 titles, as well as by table readers, portable readers, and a reader-printer for those users desiring hard copy.

ATTACHMENT B-3

CONSORTIUM OF UNIVERSITIES



THE AMERICAN UNIVERSITY
THE CATHOLIC UNIVERSITY OF AMERICA
THE GEORGE WASHINGTON UNIVERSITY
GEORGETOWN UNIVERSITY
HOWARD UNIVERSITY

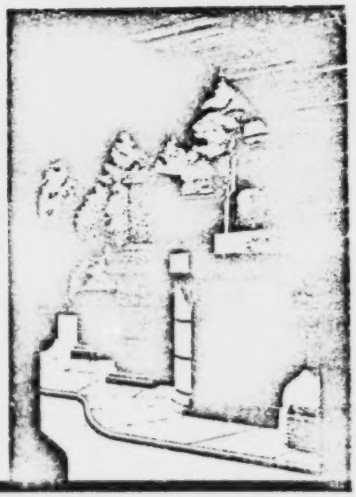
1717 MASSACHUSETTS AVENUE NW WASHINGTON DC 20036 (202) 265-1313

VOLUME V NUMBER TWO NOVEMBER 1971

SERIES ON AMERICAN LIFE AVAILABLE AT GWU LIBRARY

The George Washington University Library has received a grant for $40,000 from the National Home Library Foundation for the installation of a set of Encyclopaedia Britannica's ultra-microfiche "Library of American Civilization." The set consists of 20,000 monographic and serial volumes covering all aspects of American life prior to World War I. Effective January 1, 1972, Consortium faculty and students may use the collection at the library; faculty and all graduate students with borrowing permits may also borrow microfiche and portable readers. A reader-printer will be available for the production of hard copy.

ATTACHMENT B-4



Library of Congress

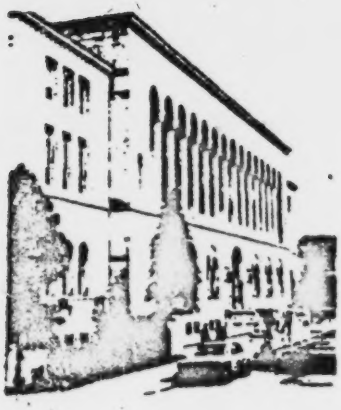
INFORMATION BULLETIN

Vol. 30, No. 44 November 4, 1971

The George Washington University Library has received a $40,000 grant from the National Home Library Foundation of Washington to install a set of the Encyclopaedia Britannica's ultra-microfiche "Library of American Civilization." The library will make the collection available to the community during 1972.

The "Library of American Civilization" consists of about 13,500 three-by-five microfiches containing some 20,000 volumes of monographic and journal titles covering all aspects of American life up to World War I. Its installation at George Washington will be accompanied by both printed catalogs of the collection and a regular set of the catalog cards for each of the 13,500 titles, as well as by table readers, portable readers, and a reader-printer for those users desiring hard copy.

ATTACHMENT B-5



THE CATHOLIC UNIVERSITY OF AMERICA LIBRARIES

STAFF newsletter

Vol. 4, No. 4 November 5, 1971 Washington, D.C. 20017

G.W. LIBRARY RECEIVES MICROBOOK LIBRARY GRANT

The National Home Library Foundation of Washington has awarded the George Washington University Library a grant of $40,000 to install a set of the Encyclopedia Britannica's ultra-fiche "Library of American Civilization" with all available associated equipment and bibliographic support. The Library is to make the resource known to a wide local audience, and to permit its use both on-site and off-site during the year 1972. From its evaluation of the demonstration, the Library hopes to develop information of help to other libraries in gaining maximum utilization of book resources in ultra-microfiche form.

ATTACHMENT B-6

(6) Wholesalers' catalogs are valued by librarians; these catalogs bring scattered material into one place and give assurance that announced books have actually been published.

(7) Order forms in catalogs are not generally needed by librarians, though they may be needed by other customers.

(8) Librarians like catalogs that will fit into typical library files, such as standard pamphlet boxes or file drawers, and some mentioned the 3x5 catalog card size as a desirable one. Book posters are used by some public and children's librarians, but do not influence purchase.

The New England pre-conference session was one of a series that the AAP marketing group has been holding. Last April, the committee brought together in New York a large number of publishers and purchasers for a general review of promotion to institutions. At that time, the publishers' view of catalogs and brochures was presented. Marilyn Abel of NAL, for example, emphasized these points on the basis of trials over some years at Wayne State and NAL: that catalogs, especially educational catalogs, serve both sales and bibliographic functions; that such catalogs are the basic promotional tools for sales to schools and libraries, with direct mail pieces and brochures serving as backups to the catalogs; that the timing of catalogs is of great importance (spring catalogs should be received in March for fall purchasing); that subject classification of the books is highly useful to buyers; that catalog copy for the educational market must be clear, concise and straightforward, not like the "cover copy" on a mass market book; and that continual study of the costs and results of mail promotion is essential. Dr. Richard L. Darling of the Columbia School of Library Service confirmed that the catalog is a basic sales tool—along with examination copies—and added that flashy brochures go into the librarian's waste basket.

the airport. Arrived in California, he went to the Marin jail, where he met Miss Davis for the first—and, so far, the only—time.

"We went through the contract, and then we just talked," Mr. Okpaku told *PW*. "What impressed me most was her great spirit. She's absolutely selfless. She's not concerned with what might happen to her so much as what was happening to George Jackson and others who are being harassed by the law. We quickly established rapport. She emphasized that the book was a composite work. She said that the manuscript was finished but she had to go over it again. She signed the contract. Two or three hours later, I was on the plane, headed back to New York."

The manuscript arrived at Third Press in June. Mr. Okpaku edited the manuscript before taking off on a long-scheduled trip to Nigeria. The book went into a crash production schedule at Colonial Press. Miss Davis read galleys in prison. On open bid, reprint rights were sold to New American Library Third Press's first reprint sale and the paperback will be out some time next year. "The book was a crucial trial run for us," Mr. Okpaku said. "We proved that we can handle a book of any size."

Miss Davis' legal difficulties continue to drone on. She has won the right to represent herself as co-counsel. Venue of the trial has been shifted from Marin County—not to San Francisco, as Miss Davis had requested, but to suburban Santa Clara County. On the ground that she cannot get a fair trial there, she will appeal that decision.

The spirit which has motivated all who have been involved in the book may perhaps be best seen in the line which gives the book its title, a line from a letter written to Miss Davis by James Baldwin, first published in *New York Review* and republished in the book. "If they take you in the morning," Mr. Baldwin wrote to her, "they will be coming for us that night." *R.H.S.*

University Library Receives Microbook Grant

The National Home Library Foundation of Washington, D.C., has awarded the George Washington University Library a grant of $40,000 to install a set of Encyclopaedia Britannica's ultramicrofiche Library of American Civilization with all available associated equipment and bibliographic support. The library is to make this resource known to a wide local audience, and to permit its use both on and off-site during the year 1972. From its evaluation of the one year demonstration, due to begin January 1, 1972, the library hopes to develop information of help to other libraries in gaining maximum utilization of book resources in microfiche form.

The Library of American Civilization is the first of a number of series planned in the ultramicrofiche format by EB (*PW*, November 9, 1970).

Lawrence Hill Starts Own Firm

Lawrence Hill, co-founder and former vice-president of Hill and Wang, which was recently acquired by Farrar, Straus & Giroux (*PW*, October 4), has formed a new independent publishing firm, Lawrence Hill & Co. Editorial offices are at 24 Burr Farms Road, Westport, Conn.; the business office is c/o David White & Co., 60 East 55th Street, New York City. The White firm will act as distributor for Hill books.

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Thomas Edison, Chemist
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A new biography of America's greatest inventor, who was, and considered himself foremost as, a chemist. Tells the stories behind his products and business ventures. Chapters on the youthful chemist, the light bulb and its accessories, the phonograph, iron ore concentration, cement and concrete, the alkaline storage battery, organic chemicals, naval research, and rubber from goldenrod.

Each chapter begins with the state of the art at the time Edison worked, recounts Edison's work in detail, and ends with a review of developments since then to show how often Edison was ahead of his time.

374 pages, with index, cloth bound (1971) $5.95 postpaid in the U.S. and Canada, plus 40 cents elsewhere.

(Dealer discounts on request)

Order From
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Washington, D.C. 20036

ATTACHMENT B-7

INTERCOM

WASHINGTON AREA LIBRARIANS

Volume 1, Number 6

December 1971

George Washington University Library was the recipient this fall of a $40 $40,000 grant which will enable it to install the new ultra-microfiche "Library of American Civilization", published by the Encyclopaedia Britannica. This series is the first of several planned by EB, and consists of some 13,500 fiche (3" x 5") containing about 20,000 volume,both monographs and journals, on all aspects of American life up to the outbreak of World War II. Table readers, several portable readers, and a reader-printer which delivers hard copy are included in the grant. A printed catalog of the 20,000 titles in the collection, and sets of catalog cards for each of the titles are also part of the package.

The year of 1972 will be used for an evaluation period, with plans to make the resource widely known to the local audience, permitting use both on and off site. It is hoped to accumulate data which will enable other libraries to make maximum use of microfiche installations.

PUBLICATIONS

We have on our desk a flyer about the Black Information Index "a guide to source information about black culture, equal opportunity, civil rights, and other [illegible] of the black

CONTINUING EDUCATION

The Department of Library Science, The Catholic University of America, will be giving a course entitled The Application of Computer Technology to Library Processes this spring semester. It is a post-MLS level course, developed as a result of the survey by Father Kortendick and Elizabeth Stone last year, and was produced (and will be taught) by Joseph Becker. We will give you more information on it later, but if you are interested you may even preregister now.

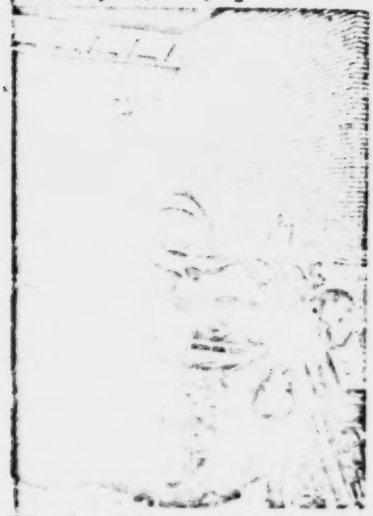
Books for Blind

The Alexandria Library has been designated by the Library of Congress as a sub-regional facility for the distribution of Talking Books for the blind and physically handicapped. This means that nearly 5,000 titles can now be obtained from Alexandria.

Fiction and nonfiction titles in a wide variety of subjects are available for both adult and juvenile readers in open-reel tapes, cassettes and disc records. Record players are issued to readers on a no-cost loan. For more information call Patty S. Arnold at the Alexandria Library Audio-Visual Department, 750-6357. (News item in the Washington Post.)

Library Journal, Jan.1,1972
v.97, no.1, p.24-25.

ATTACHMENT B-8



Who Says Librarians Etc. Etc. Dept.: am Baker, former Braniff stewardess, a Dallas Public Library staffer

essroom and binding equipment, the ature of products printed and total utput of each press, membership in inting associations, and similar subcts. Area private pressmen are asked to ntact Frank J. Anderson, Wofford brary Press, Wofford College, Sparnburg, S. C. 29301.

Municipal Reference and Research enter Remains Open Despite hreatened Closing: The New York City ouncil and the Board of Estimates have anaged to overrule Mayor Lindsay's ecision to close this Manhattan library, action which was to go into effect this st summer (*LJ*, June 1, p. 1918). Lirarian Eugene J. Bockman told *LJ* that e seven staff positions which were liminated last spring have been restored nd that the facility's operating budget as been upgraded to where it stood beore the citywide freeze went into effect. ockman said that the Council and the oard of Estimates were able to exert ressure on the grounds that the facility essential to city government agencies. he library, which is open to the public, rves as a depository for all official city ocuments and also contains many state id federal materials.

orth Carolina: The statewide teleone reference network for interloan (InATS) is now available to technical stitutions, community colleges, and -year colleges.

ommunity College Library Open to blic: The Lakewood State Junior Colge in Minnesota is now open to postgh school residents of the state, who ay get a borrower's card for $1. mmunity members are encouraged to the library for both study and general ding.

World of Print

Library Problems in Science and Technology by James Matarazzo is the third in Bowker's series, Problem Centered Approaches to Librarianship. Matarazzo is on the faculty at Simmons College. It is available for $9.95 net postpaid in the U.S. and Canada ($10.95 elsewhere), with 20 percent discount for five or more copies. R.R. Bowker Order Department, P.O. Box 1807, Ann Arbor, Mich. 48106.

The Coming of Age of LTAs: This spiral bound book contains the proceedings of the Fourth Annual Meeting of the Council on Library Technology, which was held at Palm Beach, Florida on June 4-6, 1970. Topics include the actual and potential role of the library technical assistant, LTAs and their employers, certification of LTAs, and job description. Copies are $3 each in the U.S. and $4.50 elsewhere. Order from: Council on Library Technology, Felician College Library, 3800 Peterson Ave., Chicago, Ill. 60645. Make checks payable to the Council on Library Technology.

On the Program

SRRT Task Force on Sex Related Media: This group will meet at Midwinter ALA in Chicago on Wednesday, January 26, from 4:30 to 6:00 P.M. to discuss future activities. Inform coordinator Gordon McSheean if you can make it. He's temporarily at 5803 Trask Street, Oakland, California 94605. Or call 415-865-6044.

Grants

Howard University is getting $100,000 from the Council on Library Resources and the National Endowment for the Humanities for a five-year program aimed at "establishing the university library as an integral part of students' intellectual environment." Howard matches the grant money, which will finance a project to bring the library more into the instructional process.

The Rosamond Gifford Charitable Corporation in Syracuse has awarded an $11,260 grant to SYRACUSE UNIVERSITY to provide for the completion of a definitive bibliography on Algernon Charles Swinburne, the 19th-Century British poet and novelist. The study will be carried out by John S. Mayfield, curator emeritus of manuscripts and rare books at Syracuse University.

THE GEORGE WASHINGTON UNIVERSITY LIBRARY has been awarded a $40,000 grant from the National Home Library Foundation to install a set of the *Encyclopaedia Britannica*'s ultramicrofiche "Library of American Civilization," portable readers, a reader-printer, and bibliographic support including printed catalogs and a set of catalog cards for the 13,500-title collection of monographs and journals. The library will open the collection to the public for use both on the library premises and offsite in 1972, and will release an evaluation report on the first year of the service in 1973.

Education for Librarianship

New LTA Program Announced by Rhode Island: A revised program for Library/Media Technology has been set for the spring 1972 semester at the University of Rhode Island. The new program was developed by a committee of Rhode Island librarians chaired by James Healey of the university's Graduate Library School. Open to students possessing a high school diploma or equivalent, the program has six courses: Introduction to Libraries; Technical Services I and II, Library Reader Services, Media Technology, and Practicum. The courses can be taken by themselves or as part of a formal course of study at junior college or baccalaureate levels. The program, although coordinated by Healey, is not under the library school administration but the Division of University Extension.

Legal Information Through Electronics (LITE) Training Course: The National Agricultural Library has sponsored the LITE training course as a part of its efforts to disseminate knowledge about current methods of literature retrieval. The program, which was devised by the U.S. Air Force, has been used by the Federal Government to retrieve legal materials through computers. The training program was made available to all employees of the U.S. Department of Agriculture.

Awards

Best Information Science Book Award: Robert M. Hayes and Joseph Becker received this award at the annual ASIS meeting in recognition for their *Handbook of Data Processing for Libraries*. The book was produced under the sponsorship of the Council on Library Resources and had been published by Becker and Hayes, Inc., under the Wiley-Becker and Hayes imprint.

Honorary Degree of Doctor of Humane Letters: Chungang University in Seoul, Korea has awarded Alice D. Ball, Executive Director of the United States Book Exchange, this degree "in recognition of her distinguished contribution to the international library movement and the promotion of friendship between the peoples of the Republic of Korea and the United States of America." The degree

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the founding of

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UNIVERSITY LIBRARY GETS GRANT FOR MICROBOOKS

If micropublishers supply all the bibliographic tools librarians are demanding, if they provide card and book catalogs and guides to the collection, and if they also produce portable lap-readers, will library patrons then use microforms? That question may be answered by an experiment about to be embarked upon by the George Washington University Library (Washington, D.C.).

The institution has just received a $40,000 grant from the National Home Library Foundation (Washington, D.C.), to purchase a set of the Encyclopaedia Britannica's Microbook Library of American Civilization, "with all available associated equipment and bibliographic support." Under the terms of the grant, the University will widely publicize the availability of its high-reduction fiche-form resource, for both in- and extra-library use. The one-year test is scheduled to begin on January 1.

This test should be equally welcome to librarians and micropublishers, and selection of the EB project, one which was specifically designed to meet librarians' demands for bibliographic tools and take-home viewers, is also important. In addition to its high-reduction microfiche, EB is supplying each library customer with five bound book catalogs, ten sets of fiche-form book catalogs, one set of envelopes for the fiche (with catalog information printed on the envelopes), and fifteen sets of topical biblioguides. Standard catalog cards may be purchased separately. And as soon as Technicolor begins delivering the lap-reader, take-home use of EB microforms also becomes possible.

MICRO/MEMOS

Reflecting continued success in the COM services business, Data Dissemination Systems Inc. has announced its move to a facility which is five times larger than its previous home. Beginning this week, the company may be reached at 11161 West Pico Blvd, Los Angeles, California 90064. Of more than passing interest to cartographers, DDSI is now offering a unique mapping capability which allows it to produce mosaicked maps without the gaps which are otherwise common with COM-generated graphics.

A microform sample kit, incorporating aperture cards, microfiche, ultrafiche and 16mm and 35mm film clips, is now available from Dataflow Systems Inc. (7758 Wisconsin Avenue, Bethesda, Maryland 20014). The demonstration kit, which comes complete with a description of each microform and appropriate applications areas, is available for $4.95.

IBM is exploring the educational applications for computers, and recent work by its Advanced Systems Development Division indicates an opening for microforms. The experimental application interfaces an optical image display with a film strip cartridge unit. Under computer control, students can retrieve information about 400 occupations, 400 post-high school areas of study, and other items of importance in choosing college curriculums. Depending on the size of the file, a computer-controlled microform system might be more handy than the filmstrips.

ATTACHMENT B-10

GWU Library

Staff Notes

February, 1972

"LIBRARY OF AMERICAN CIVILIZATION" DEMONSTRATION IN SPECIAL COLLECTIONS

by Paul A. Napier

The National Home Library Foundation of Washington has awarded the University Library a grant of $40,000 to install a set of the Encyclopaedia Britannica's ultra-microfiche "Library of American Civilization." The collection, produced by an Encyclopaedia Britannica subsidiary, Library Resources, Inc., is now available along with the required reading equipment and the associated book catalogs in the Special Collections Department.

The Library of American Civilization, the first in the Microbook Library Series, was published in 1971. Containing 6,000,000 pages and approximately 20,000 volumes, it is made up of carefully selected materials on all aspects of American life and literature, covering every period up to the outbreak of World War I. It includes the important points of view reflected in American writings, from those of the framers of the Constitution to those of Indians, Negroes, and other groups that have played such an important part in the shaping of American society.

The Library of American Civilization contains the most significant 20,000 volumes out of the total material in its field - more than 300,000 titles published in the United States up to 1914, in addition to periodicals and government documents, and materials of foreign origin bearing on this country. The selection is based on the widest possible view of American civilization. Analysis of the principal bibliographies of American civilization, literature, and history shows that an outstanding collection can be encompassed in a library of about 20,000 volumes.

The Library will be extremely useful in courses on the history of the United States. It is designed to bring out every aspect of this history - political, economic, social, cultural, scientific, and technological. The Library will also find heavy use in departments of English and American literature. In other subject areas, the Library will help maintain links with the past: in government,

economics, and law, by showing origins and development of our modern system; in drama, dance, music, and other arts, by reminding the student of older themes and treatments. For future teachers the Library can provide a strong foundation in American studies and the history of the development of American education.

The University Library is to make the resource known to a wide local audience, and to permit its use both on and off-site during the year 1972. From its evaluation of the demonstration, the Library hopes to develop information of help to other libraries in gaining maximum utilization of book resources in ultra-microfiche form.

* * * * * * * * * * *

The Microbook Library Series, published by Library Resources Inc., an Encyclopaedia Britannica Company, is a new program designed to augment the teaching and research libraries of colleges and universities...at very low cost. The key elements are:

high reduction technology, which permits the collections of the world's most distinguished libraries to be photographically reproduced in miniature form with great precision;

a comprehensive editorial plan, which assures, through careful selection, cataloging, and indexing, that each library will be a definitive and highly useful collection.

The first library of the series will be

The Library of American Civilization, Beginnings to 1914.

The library of 6,000,000 pages, approximately 20,000 volumes, and over 12,000 titles, will range over all aspects of America's culture, treating every field and reflecting every important point of view. Subsequent libraries will cover other cultures and fields of study with equal thoroughness.

Principal goals of the project are:

- *The Medium*—to establish microform as a standard library medium by publishing libraries in this form of such scope and quality as to insure wide acceptance;
- *Bibliographic Support*—to provide full bibliographic support for each library;
- *Low Acquisition Cost*—to achieve the economies inherent in the medium and in centralized selection, cataloging, and indexing;
- *Complete System Integrity*—to make available low cost, high-quality microforms, readers, and reader-printers designed to meet approved library standards.

These goals make it possible for colleges to acquire extensive library resources at a fraction of the normal cost, and to reduce operating expenses markedly. Eventually we expect microform to make it possible to operate the library on a *distributing* basis as well as on a *circulating* basis.

ATTACHMENT D

The Library of American Civilization is the first in the new MICROBOOK series published by Library Resources Inc., an Encyclopaedia Britannica company, to help augment the teaching and research resources of colleges and universities... at very low cost and at great savings in space and library staff time.

19,000 BIBLIOGRAPHIC VOLUMES MORE THAN 6,700,000 PAGES

The Library of American Civilization is a retrospective collection—gathered from major U.S. libraries—covering all aspects of American life and literature from their beginnings to the outbreak of World War I. It includes pamphlets, periodicals, documents, biographies and autobiographies, fictional works, poetry, collected works and papers, material of foreign origin relating to America, and many rare books not generally available.

Material in 25 subject areas gives complete, balanced coverage.

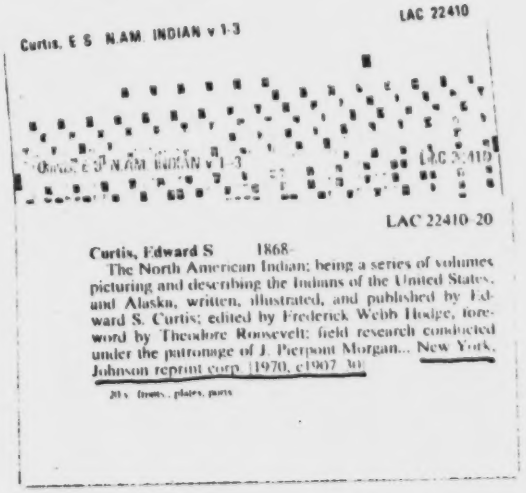
- Politics and Government
- Constitutional History
- Foreign Affairs
- Military History
- Reform
- Intellectual History
- Science and Technology
- Education
- Religion
- Afro-Americans
- American Indians
- Immigration and Minorities
- The Frontier
- The South
- Agriculture
- Business
- Labor
- Literature
- Music
- Visual Arts
- Architecture
- The City
- Manners and Customs
- Local History
- Early Exploration

Titles in the collection were selected by distinguished college and university faculty members, chosen for their preeminence in American studies, to provide an educational library of the highest attainable standards.

Comprehensive cataloging and indexing, included with each library makes it instantly usable.

the microbook fiche

The entire Library of American Civilization is photographically reproduced on approximately 12,000 3-inch by 5-inch film cards (or fiche). The MICROBOOK fiche can contain up to 1,000 pages. However, under a policy of unitization, each book of 100 pages or more is on its own fiche. This allows the fiche to be acquired, stored and circulated like a book. Special MICROBOOK readers, including a portable model, magnify most page images to actual page size, or larger, for extended reading in normal room light.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Curtis, E S N.AM. INDIAN v 1-3

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Curtis, Edward S 1868-

The North American Indian; being a series of volumes picturing and describing the Indians of the United States, and Alaska, written, illustrated, and published by Edward S. Curtis; edited by Frederick Webb Hodge, foreword by Theodore Roosevelt; field research conducted under the patronage of J. Pierpont Morgan... New York, Johnson reprint corp. [1970, c1907-30]

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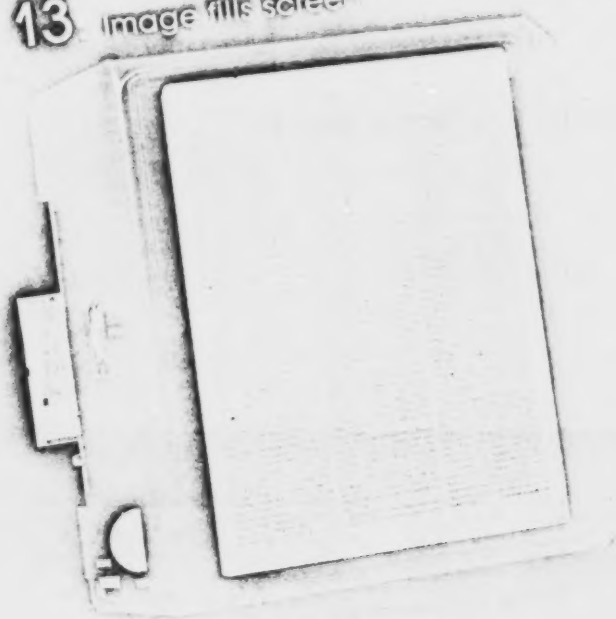
ATTACHMENT E

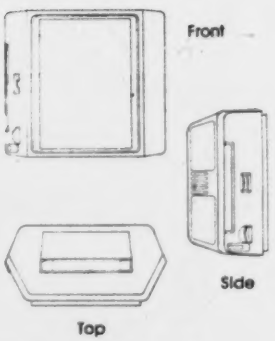
1. A higher and more uniform illumination level with improved contrast than what is available in most microform viewers
2. Lightweight
3. Small compact easy to hold design
4. Solid state supply
5. Cord storage area
6. Uniform sharp image
7. Mechanically detented two direction fiche transport mechanism with fine tune override
8. Case design allows unit to sit on side for viewing rotated images
9. A magnification level that allows the majority of the material to be viewed at full size or larger
10. Constant focus lens design with little or no page to page focus readjustment
11. Angle of screen allows extended reading
12. Easy lamp replacement
13. Image fills screen



ATTACHMENT E (cont.)

SPECIFICATIONS

HEIGHT	11¼ Inches (28.6 CM.)
WIDTH	11¾ Inches (29.9 CM.)
DEPTH	6¼ Inches (15.9 cm)
MAGNIFICATION	75X
FICHE MOVEMENT	Mechanically Coupled Fiche Transport
POWER REQUIREMENTS	120 Volts A.C./50 Watts
SCREEN SIZE	7⅛ Inches x 10 Inches (18 CM. x 25.4 CM.)
FOCUS	Automatic self compensating
SCREEN ANGLE	17°
IMAGE ROTATION	Manual (Case designed to sit on side.)
FRAME POSITIONING	Individual locating by means of horizontal and vertical detented knobs. Fine tune override.
WEIGHT	5 Pounds (approx.)



microbook 710 PORTAREADER

ATTACHMENT F

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7/4/72 ✓

The 710 Microbook Portareader

WARRANTY DISCLAIMER AND REGISTRATION

"This Microfiche Reader is warranted to be free from defects in materials and workmanship for a period of ninety days from the date of delivery.

"This Warranty is to be fulfilled by the replacing of any defective part, free of charge, only at a Technicolor, Inc. authorized Warranty Service Station.

"This Warranty becomes valid after the bottom half of this card is filled in by the purchaser and mailed to 299 Kalmus Drive, Costa Mesa, California, within fifteen (15) days of the date of delivery.

"This Warranty is void if this Microfiche Reader, or any of its parts, shows evidence of damage caused by accident, of misuse or of tampering or repairs by anyone else.

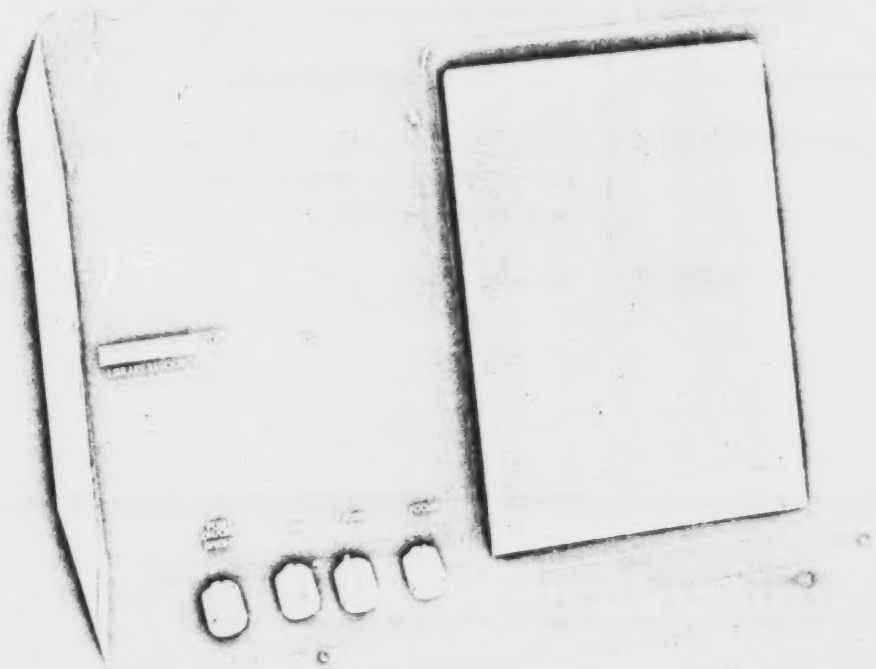
"This Warranty does not extend to (i) damages to a Microfiche damaged by this Microfiche Reader, (ii) lamps, and (iii) shipping charges. This Warranty is applicable only when the Microfiche Reader is used exclusively within the United States, its territories and possessions and with 60-cycle, 110- to 125-volt current.

"THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY FURTHER EXPRESS OR IMPLIED WARRANTIES BY ANY PARTY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY OTHER OBLIGATIONS TO THE PURCHASER."

"Technicolor, Inc."

ATTACHMENT G

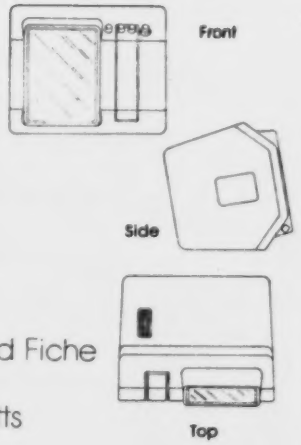
1. Larger screen
2. Higher magnification resulting in all material being provided at unity magnification or greater
3. A higher and more uniform illumination level with improved contrast
4. A uniformally sharp image
5. Built-in mechanical image rotation
6. Variable illumination
7. Rugged dependable design
8. Mechanically detented two direction fiche transport mechanism with fine tune override
9. Constant focus lens design with little or no page to page focus readjustment
10. Location and angle of screen allows extended viewing
11. Easy lamp replacement
12. Image fills screen



ATTACHMENT G (cont.)

SPECIFICATIONS

HEIGHT	17 1/4 Inches (43.8 CM.)
WIDTH	21 Inches (53.3 cm)
DEPTH	16 Inches (40.6 cm)
MAGNIFICATION	90X
FICHE MOVEMENT	Mechanically Coupled Fiche
POWER REQUIREMENTS	120 Volts A.C./120 Watts
SCREEN SIZE	8.5 Inches x 12 Inches (21.6 CM. x 30.5 CM.)
SCREEN	High quality clear gray screen
FOCUS	Automatic self compensating
SCREEN ANGLE	Adjustable (10°-20°)
IMAGE ROTATION	Built in mechanical rotation
FRAME POSITIONING	Individual locating by means of horizontal and vertical detented knobs. Fine tune override.
WEIGHT	52 Pounds



microbook 912 READER

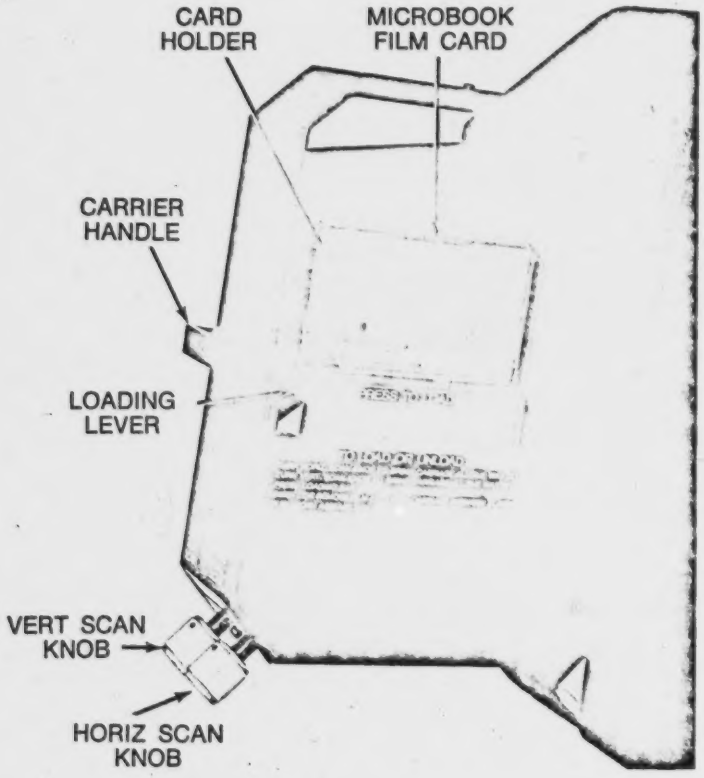


Figure 2. Carrier Details

operation of the controls and the movement of the film card holder. It should be easy and positive. Examine the glass flats in the card holder for damage — chips, cracks or breakage. Broken or cracked glass is not useable and must be replaced. Chipped glass may be used during an emergency but should be replaced as soon as possible.

Press the center of the Press to Load Bar (Figure 3) and observe the separation of the glass flats. Separation should be complete and uniform along the top edge. Release the Press to Load Bar and observe the return of the glass flats. They must come together completely and evenly. Removal and replacement of the glass flats is described in the Maintenance Section of this manual.

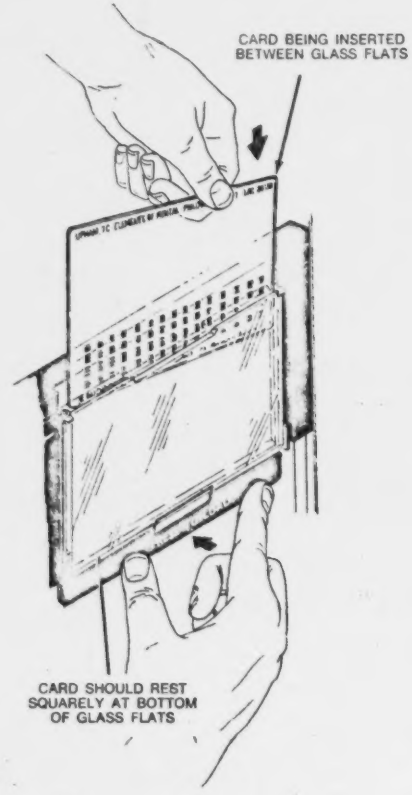


Figure 3. Film Card Insertion